BARBADOS.

REPORT

OF THE

CHIEF MEDICAL OFFICER

FOR THE YEAR

1933—34.

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No. 304 J.j. 30/35.

Chief Medical Officer's Office,
Barbados.
16 February, 1935.

Sir,

I have the honour to submit to His Excellency the Governor, for the information of the Legislature, the annexed report required under the Poor Relief and Public Health (Amendment) Acts for the year ending 31st. March 1934.

2. The appendices showing the causes of death, the report of the Port Health Officer and the report on poliomyelitis are made up for the year January-December 1933, and those showing parochial expenditures are made up for the parochial year 25th. March 1933—24th. March 1934.

I have the honour to be,
Sir,
Your obedient servant,

JOHN F. C. HASLAM,
Chief Medical Officer.

The Honourable,
The Colonial Secretary,
BARBADOS.

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APPENDICES.

REPORT

OF THE

Chief Medical Officer

FOR THE YEAR 1ST APRIL 1933 to 31ST MARCH 1934.

PART I. GENERAL.

STAFF.

1. The number and personnel of the staff in the Chief Medical Officer's office remained unchanged throughout the year. The need for additional clerical staff, mentioned in my last Report, has become even greater.‡ The volume of correspondence passing through the office is much increased by the fact that decentralised administration of public health work and poor relief necessitates frequent communication with no less than twenty-two parochial boards. The work of the office has naturally developed and expanded owing to the fact that for the first time since the post of Chief Medical Officer was created, it has been occupied by the same whole-time officer, for longer than a few months.

2. The post of "Sanitation Officer" created in 1928 has not yet been filled. In Britain itself and throughout British dependencies the officer performing the duties here allotted to a "Sanitation Officer" is known as the "Medical Officer of Health." While no excessive importance need be attached to the verbal description of an office, I suggest that it is preferable to employ a title whose significance is understood the world over. Of greater importance is it that the post should be filled. In the absence of this officer a considerable number of things necessary and desirable for the protection of the public health are being left undone. Among the most important of these is the tracing of the source of infection in typhoid cases which continue to be prevalent. Details given in notification forms frequently leave it in doubt whether repeated cases in a family or locality are due to contact, to a "carrier", or to some persistent but inanimate source of infection. Determination of such problems lies at the root of preventive action. Since the necessary enquiries and taking of specimens have to be done at once and here, there and all over the Island, it is impossible to add systematic work on these lines to the duties of any existing officer. I am confident that the Sanitation Officer, when appointed, will find his office anything but a sinecure and it is one of great potential benefit to the community. *Inter alia* he should make a beginning with systematic inspection of school children; and his usefulness to the community would be enhanced if, pending more satisfactory arrangements, the Central Government and the Vestry of St. Michael were to agree to appoint this officer to be Medical Officer of Health for the city and environs of Bridgetown with the duties and status appropriate to that office.

3. The Poor Relief Act and Public Health (Amendment) Act, 1933-44 became law during the year now under review. This is the Act which authorised the publication of one annual report covering both poor relief and public health and adjusted the date of the Report. It was referred to in my last Annual Report which, in anticipation of the passing of the Act, was delayed in order that one report might be published instead of two. The Act of 1933 when drafted as a Bill also intended to do away with a great number of routine, periodical reports, but in the course of passage through the Legislature, the Bill was so amended as to require twenty-two reports a year not formerly demanded. The net effect, however, was to reduce the total expenditure of paper and ink. The re-

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‡ An additional clerk was appointed on 1st. August 1934, i.e. subsequent to the period covered by this Report.

maining effect of the new Act was to abolish the anomaly whereby the Chief Medical Officer was required to report to the Poor Law Board on the General Hospital, the Mental Hospital and other institutions not really connected with poor relief. Reports now go to appropriate authorities.

4. During the year the Committee appointed to consider Dr. Seagar's Report of 1932 completed its deliberations and reported, with recommendations, to Government. The Chief Medical Officer was invited to comment upon the Committee's findings. Up to the end of the year under review the Committee's Report had not been published nor had effect been given to any proposals by them or by Dr. Seagar except those mentioned in the foregoing paragraph.

PART II. MEDICAL.

(A) GENERAL OUTLINE.

1. In general, public provision for care of the sick remains as heretofore. The arrangements are unusual if not unique and the main facts are set out here at some length since I think it important that these should be more clearly realised, both in Barbados and elsewhere, than is the case at present.

2. Government maintains a Mental Hospital (over 500 inmates and increasing), a Leper Hospital (81 inmates and decreasing), small hospitals in connection with the police barracks, the prison and the industrial schools.

3. Government finances, but does not control an incorporated society which conducts the Barbados General Hospital.

4. Parochial poor law authorities maintain eleven parochial almshouses where many sick persons who are technically paupers are treated and the same authorities provide, for the same clientele, domiciliary and dispensary services through their Parochial Medical Officers.

5. The only direct concern of the Chief Medical Officer with any of the arrangements mentioned above lies in his statutory duty of inspection. He has no supervisory or directing functions, but may, of course, be called upon to advise Government.

6. Government finances, but does not control, a Venereal Diseases Clinic Committee which conducts a central clinic at the Barbados General Hospital and supplies medicaments to eight parochial clinics conducted by as many parish authorities. So little is the work of this Committee a Government organisation that the Committee is denied the privilege of duty-free import of its supplies. The Chief Medical Officer's official relationship to these clinics appears to be nil. He is not *ex officio* or otherwise a member of the V.D.C. Committee; no holder of the substantive post of Chief Medical Officer has ever been appointed to the Committee.

7. A charitable society, the Baby Welfare League, receiving £150 a year from Government and a like sum from St. Michael's Vestry, represents organised maternity and infant welfare work. Its activities are directed by a committee of ladies and are not overlooked in any way by government or parochial department or officer. Its operations are confined to one clinic in Bridgetown, and the public subscribes little or nothing towards the work. Within its means it does excellent work.

8. There is no medical oversight of children at the public schools and responsibility for sanitary arrangements at these is ill defined and divided between the central education authority and the eleven parochial health authorities. None of these authorities makes provision for, or is required to seek, expert advice re the health of the school children or the healthiness of school surroundings. Obviously the central education authority may claim the advice of the Chief Medical Officer employed by the Central Government, but in the year under review no request for help was received. I have always proceeded on the understanding that parochial authorities are equally free to call upon my knowledge and experience, and have encouraged them to do so. Some of them do ask my advice and some even act on it. One Chairman of Parochial Health Commissioners, when I pointed to obvious errors in some new school undertakings and suggested that my advice might have been sought beforehand, replied that his board welcomed my constructive criticisms afterwards, but in the first place regarded their senior sanitary inspector as their expert adviser. The matter under discussion would never have gone wrong under a well trained inspector really controlling the work, but when the so-called expert adviser is

but poorly trained, and sanitary works are given by a lay board (or by its Chairman) direct to a small contractor, without drawings or specifications and even without the Chief Sanitary Inspector's knowledge, it is not surprising that mistakes occur and money is wasted.

9. There is, in the public medical arrangements of Barbados, a very serious lack (it is almost complete absence) of provision for in-patient treatment of difficult or abnormal midwifery cases and a like absence of provision for ante-natal consultation. This matter is more fully considered, along with recommendations to meet the need, in the *Report on the Hospital Services of Barbados* which is printed as an appendix to this report.

10. Provision for the handling of communicable diseases in Barbados seems to be nobody's child. The present position of the Island in respect of accommodation for this type of disease is more fully discussed in the special report referred to above.

11. The whole-time medical officers employed by Government are the Chief Medical Officer, the Port Health Officer, the Medical Superintendent and Assistant Medical Superintendent of the Mental Hospital and the Government Bacteriologist and Pathologist. Private practitioners hold paid part-time appointments as follows :—One Assistant Port Health Officer, one Visiting Physician of the Leper Hospital; one Medical Officer of H.M. Prison; six medical officers to the Police and twelve public vaccinators. Neither the whole-time nor part-time officers are units of a medical department or service. Their work is not officially coordinated in any way and each is individually responsible direct to Government. The Chief Medical Officer is expressly excluded from any supervision or direction of the work of any one of them and also from any planning or co-ordination of the medical work as a whole. He is, to all of the medical men receiving pay from the public Treasury, no more than an unrelated, inspecting government official. While the foregoing is the official position, strongly insisted upon by certain public men who refuse to contemplate a medical service and describe such as "the thin end of the wedge of Crown Colony Government," those actually performing medical work for Government, realising the futility of working in watertight compartments, have personally given me every support and assistance. The official position, however, is not without difficulties both actual and potential.

12. The medical staff of the Barbados General Hospital, both visiting and resident, and also the nursing staff, have no relation to Government whatsoever. They are engaged, they resign, they may be dismissed or they may die without the putting of government pen to government paper except for, in the last case, an entry in the deaths register. The funds which pay them, however, come from the public purse. Their relation to the Chief Medical Officer is nil.

(B) MEDICAL INSTITUTIONS.

1. The Barbados General Hospital.

This institution is dealt with fully in Parts I and II of the special *Report on the Hospital Services of Barbados* at pages 41 and 47 of this Report. The number of beds remains unchanged and is quite insufficient for the needs of the population. The deficiencies referred to in my last report in respect of nursing staff, quarters for nurses, out-patient accommodation, housing of secretariat and office staff and bio-chemical work remain unrelieved. The numbers of in-patients and of out-patients treated in the year ending 31st. March 1934 were respectively 3,996 and 41,820.‡ The operations performed numbered 1,377. The Board of Management (16 members) met nine times during the year ending 31st. March 1934; one member of the board did not attend any meeting; one attended once only, none attended two meetings only, one attended 3 meetings and thirteen attended four or more meetings; two members attended all nine meetings. The House Committee (12 members) met fourteen times during the year. One member attended no meeting, one attended once, two attended twice, none attended 3 times only and six were present at half or more of the meetings; no member attended all fourteen meetings.

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‡ On investigation this figure has been found to represent out-patient attendances, not persons attending.

2. The Mental Hospital.

The medical staff consists of the Medical Superintendent, Dr. W .S. Birch, *M.C.*, M.R.C.S., L.R.C.P., and an Assistant Medical Superintendent, Dr. A. L. Goddard, M.D., C.M., L.M.C.C. For the accommodation of inmates there are 29 dormitories, 3 day rooms and 256 single rooms. At the end of March 1934 there were 529 patients in residence, of whom 293 were females.

The expenditure in connection with this institution for the year 1933-34 was £11,324. 18. 3.

The quality of service rendered to the mentally infirm of the Colony is good, as is the standard of administrative work at the asylum.

3. The Leper Hospital.

The lay Superintendent, Mr. J. H. O. Goddard, has served the institution for many years and throughout the year under review it has been administered with smoothness and efficiency. Dr. E. W. Roberts was appointed Visiting Physician on 12th. June 1933 and continues in that appointment. The expenditure was £3,633. 3. 6. Provision is made in the estimates of expenditure of this institution for the payment of small sums to assist those persons who have undergone treatment and have been discharged as cured or not infective. £460 7. 0 was thus paid during the year. At the beginning of the year under review there were 87 inmates. There were 7 new admissions, 2 re-admissions (both on account of relapse), 3 discharges of non-infective or cured persons and 12 deaths. At the end of the year there were 81 inmates. Among the 60 known discharged persons at the beginning of the year there were 2 relapses, no re-admissions on compassionate grounds and 3 deaths. The management, sanitation and discipline were satisfactory and the patients were well cared for and treated.

4. The Prison Hospital.

There is a ward for males and one for females. These are admirably conducted by the medical officer of the prison, Dr. L. C. Hutson, a part-time officer. The prisoners treated in hospital numbered 42 males and 12 females. The incidence of sickness was low among prisoners and its character calls for no comment.

5. The Government Industrial Schools.

Both institutions, that for boys and that for girls, have been maintained in tidy and sanitary condition. The benefit of the good diet received and the discipline enforced is evident in the condition, demeanour, health and weight records of the boys and girls. There is an excellent absence of prison atmosphere at both institutions. Disease incidence calls for no comment. The medical and sanitary supervision is a part-time duty of Dr. F. W. Greaves.

6. The Venereal Diseases Clinics.

These have been referred to in paragraph 6 of Part IIA. on page 2. Improved record keeping at these clinics was instituted during the year under review and it is now possible to state their work in numerical terms with some degree of accuracy.

For the period 1st April 1933—31st March 1934 there were dealt with:—

	New Cases	Old Cases	Attended regularly	Attended irregularly	Were lost sight of	Gross attendances
Syphilis ...	1,322	1,283	542	2,063	613	13,228
Gonorrhœa ...	866	673	295	1,244	421	18,447
All V. D. ...	2,197	1,981	841	3,337	1,035	31,950

The new building for the Central Clinic was still not available at the end of the period under review although nine years had elapsed since money was provided for the project, a melancholy circumstance attributable mainly, in my view, to the fact that the early planning and arrangements were in the hands of the inevitable committee instead of in those of one trained and responsible individual. Strangely enough, the interminable delays, which were referred to in my last report, have not excited even a whisper of public comment or criticism. But the bulk of the funds expended on this unlucky project derived not from local resources but from a free grant by the Colonial Development Fund.

7. Parochial Almshouses (Medical Work).

The part played by these almshouses as institutions for the care of the sick is referred to with some fullnes in the special report already referred to, (see paragrahps 6 and 7 at pages 42 and 43). Considerable minor structural improvements have been carried out during the year under review. Within the limits of scope and efficiency imposed by old fashioned and inconvenient buildings and by indifferent equipment and nursing, the minor medical and surgical service of these institutions is in the main competent and satisfactory. Approximately 3,295 persons were treated as in-patients in these eleven institutions.

8. The Infant Welfare Clinic.

The Clinic is conducted by the Baby Welfare League which is managed by a committee of twelve ladies and staffed by seven lady inquiry officers (voluntary) and a part-time medical officer and two nurses. During the year here reviewed the League had to leave its quarters owing to the lamented death of its founder, Mrs. Sinclair Browne, M.B.E., at whose private house the clinic was conducted. It is now operating at the private consulting rooms of its medical officer, Dr. Roberts, through that gentleman's kind courtesy. Arrangements are in train permanently to house the League's work in a new building to be erected on a site generously donated by Mr. George Browne, C.M.G., the son of the late Mrs. Sinclair Browne. During the year to 31st December 1933, 306 new babies were entered at the clinic, of whom 31 died. There were 2,884 subsequent attendances. the League's work is appreciated by the mothers and its value to the community is great; its resources are little over £300 per annum which is far from sufficient to meet the very obvious needs of the Colony but public opinion in support of such work is lukewarm, if indeed it is so warm as that.

9. The General Nursing Council.

The Rules regarding formation of, publication of, and admission to the Roll of Midwives and Register of Nurses were completed during the year and passed by the Legislature on 14th March 1934, and actual registrations were commenced immediately thereafter.

PART III. PUBLIC HEALTH.

(A) HEALTH OF THE ISLAND AS A WHOLE.

1. The following are the principal statistical data for the calendar year ended 31st December 1933.

Population estimated at	180,055
Births registered	5,316
Deaths registered	3,593
Birth rate per 1,000 living	29.8
Death rate per 1,000 living	20.1
Infant mortality per 1,000 live births	235
(Illegitimate 277, legitimate 171).	

2. The general mortality rate and the infant mortality are unusually low. It is to be noted that 42.7% of all deaths in the Colony occur under 5 years of age. Tables showing the causes of deaths in each parish and in age-groups for the whole Island, are annexed to this Report as Appendices III and IV. Only 2.6% of the causes of deaths was "uncertified".

3. (a) 14.3 per cent of all deaths were due to syphilis.
12.3 per cent of all deaths were due to dysentery and enteritis.
7.6 per cent of all deaths were due to diseases of early infancy.
6.8 per cent of all deaths were due to diseases of the heart.
6.1 per cent of all deaths were due to senility.
5.8 per cent of all deaths were due to nephritis.
5.8 per cent of all deaths were due to pneumonia.
3.0 per cent of all deaths were due to cancer.
2.9 per cent of all deaths were due to pellagra.
2.8 per cent of all deaths were due to tuberculosis.
0.9 per cent of all deaths were due to enteric fever.

(b.i) The following rough analysis of the mortality of Barbados suggests that in respect of preventable mortality public health efforts require to be directed along the lines of a child welfare organisation.

The total deaths numbered 3,593 of which 1,060 were of persons over 60 years of age leaving 2,533 deaths which may be called preventable. Of these 2,533 preventable deaths no fewer than 2,222 were deaths of children under five years of age (1,248 under 1 year). About two thirds of the deaths under 5 years were accounted for by a small group of causes thus:

Syphilis	413	deaths
Diarrhoea and enteritis	389	,,
Bronchitis and pneumonia	298	,,
Diseases peculiar to early infancy	272	,,
Tetanus	36	,,
	1,408	

It is evident that in respect of preventable mortality the problem of Barbados mainly concerns early childhood. Syphilis in the very young may be less common than death certificates unsupported by laboratory tests suggest, but is probably of frequent occurrence and is certainly preventable by ante-natal examination and treatment of the mother. The diarrhoea and enteritis I believe to be more closely connected with poverty, unsuitable feeding and lack of maternal care than with faulty general sanitary conditions. In support of this belief one may quote the small number (54) of deaths from these causes at 5 years and over, the diminishing incidence of typhoid and its small total mortality (34 deaths at all ages). Whatever may be the correct preventive measure to adopt regarding the bronchitis and pneumonia, I can see no reason to doubt that all others of the group causing the major part of child mortality could be vastly diminished in effect by means of a maternity and child welfare organisation such as has established itself practically everywhere else as an integral part of official public health effort, but is conspicuously absent in Barbados.

(b.ii) When advocating such efforts in Barbados one is very frequently confronted by the statement, even from responsible public men, that there are too many people in the Island already and that therefore efforts at saving child life are undesirable. Certainly the population problem is serious and, I think, two little regarded from the point of view of developing a policy before acute difficulty occurs. At present the increase is some 3,000 souls per annum. In the life of the colony 20 years is not a long time, and there seems little likelihood that within that period Barbados can support an additional sixty to eighty thousand people. I do not think, however, that any public man who privately argues against infant welfare schemes would publicly support a policy of letting the children die as a means of handling the problem, even if the rate of mortality was sufficient to be an effective remedy, which it is not.

4. The following was the incidence of notifiable diseases.

Cases Notified :—

Enteric Fever	136	Cholera	nil
Diphtheria	8	Plague	,,
Leprosy	6	Small pox	,,
Tuberculosis	62	Typhus	,,
Poliomyelitis	61	Yellow Fever	,,

5. No case of quarantinable disease (those named in the right hand column of paragraph 4) occurred in the Island in the period under review, nor was any such case imported from elsewhere.

6. Syphilis was given as the primary cause of death of 514 persons, 413 of these being under 5 years of age. Though syphilis is certainly widespread, I regard these figures with some misgiving. The diagnosis in practically none of these cases was confirmed by a reliable laboratory test.

7. Enteric fever is still endemic all over Barbados and so long as this is the case there is always the possibility of sharp epidemic outbreaks. There is evidence, however, of steady diminution of enteric incidence in which a part is played, I believe, both by a slowly improving standard of general sanitation and by the fairly general inoculation of contacts. The cases notified in the last five calendar years have numbered: 1929, 209; 1930, 190; 1931, 258; 1932, 211; 1933, 136. The weekly notifications are now very consistently below the weekly expectation calculated on the experience of the preceding nine years.

8. At the commencement of the year under review there had just begun the Colony's first experience of epidemic poliomyelitis. This was referred to in my last report, but the final results are of interest. These are based on a personal examination of every traceable case. They appear in full in Appendix VI on page 36 and are summarised below.

One year after the beginning of the epidemic the position was :—

61 notifications had been received within 6 months.
6 were dead of poliomyelitis.
1 was dead of other disease.
1 had left Barbados.
1 was not traced.
12 showed no discoverable ill effects.
13 showed so little damage as to be as good as ever.
11 had active use of the affected part but with efficiency reduced.
9 had wage-earning power permanently and seriously reduced.
7 were infants about whom a final verdict cannot yet be given.
0 appeared likely to be permanent, totally dependent cripples.

9. The notifications of tuberculosis numbered 62. This is an increase over the figure for the previous year, 50, though well below the figure for 1931, 95. I regard the increase as due to improved notification rather than to increased prevalence. The mortality per 10,000 living was 5.6 and tuberculosis caused 2.8 per cent of all deaths.

	1928	1929	1930	1931	1932	1933
Death rate per 10,000 living	11·16	9·5	7·4	7·8	6·7	5·6
Tuberculosis deaths per cent of all deaths	3·8	4·0	3·2	3·0	3·5	2·8

These figures support the view expressed last year that there is no evidence to justify a current belief that tuberculosis is a considerable and increasing menace in Barbados.

10. Both indigenous malaria and its conveying mosquito continue to absent themselves from Barbados. The continued absence of the anopheles, like its disappearance in 1930, must be attributed, along with many other advantages of this fortunate Island, to the kindliness of Providence rather than to the sanitary efficiency of man. Far too many potential breeding grounds of anopheles and actual breeding places of other mosquitoes are still tolerated in and close to residential districts.

11. Infection by filaria is not now an important health problem. Indeed filariasis and filarial elephantiasis figure very inconspicuously in medical experience in Barbados now-a-days.

12. Dysentery, both amoebic and bacillary, is encountered along with less definite intestinal disorders. The improved laboratory service now available and the early appointment of a Sanitation Officer should assist to enlarge our too scanty knowledge of the exact nature of the intestinal disorders which rank second among the causes of death.

13. November and December 1933 and January 1934 showed a recurrence of cases of febrile jaundice with several deaths. Serum taken from such cases of the previous year's outbreak was reported from England to be completely negative for yellow fever by "protection" tests, and did not react with English strains of the leptospira of Weil's disease. In the calendar year 1933 40 deaths were certified as due to febrile jaundice, 28 of which were of persons between 20 and 40 years of age.

14. Seven new cases of leprosy came to notice during 1933–34; 3 persons in whom the disease was arrested were discharged from the special hospital and 2 discharged cases relapsed. At the end of the period under review there were in Barbados 81 persons isolated in the leprosy hospital, one person isolated at home on account of leprosy and 60 persons formerly suffering from that disease free in the community but prohibited from engaging in certain occupations. The year's expenditure at the hospital was £3,633. 3. 6 and £460. 7. 0 was expended in paying compassionate allowances to discharged persons.

PART III.

(B) SANITATION AND SANITARY ADMINISTRATION IN THE ISLAND AS A WHOLE.

1. During the year under review no change has occurred in the general sanitary organisation of the Island. There continue to exist eleven independent public health authorities whose activities are and can be coordinated by the General Board of Health only to a minimal extent, and that by invitation only.

2. No one of the eleven authorities has an expert adviser equivalent to a medical officer of health, not even the parish of St. Michael with some 65,000 inhabitants and containing the capital city where are congested together half or more of the parish's people.

3. The eleven sanitary authorities of this Island employ 67 sanitary inspectors for an area of 166 square miles and population about 180,000. This number of inspectors seems high when it is realised that Trinidad with an area of 1,863 square miles and population of about 350,000 employs only 51, of whom 19 are occupied in Port-of-Spain, while British Guiana, dealing with an area of some 600 square miles containing about 100,000 people employs 54 inspectors. No fair comparison can be made of the cost to the public of the sanitary inspectors of the three colonies on account of the different standards of training demanded before appointment, varying costs of living and of general wage scales. I am confident, however, that in Barbados centralised control would permit of a smaller number of inspectors, allowing these to be more highly qualified and better paid than at present, and resulting in increased efficiency without extra cost and possibly with economy.

4. The parochial sanitary authorities seek my advice when it seems good to them to do so and I proffer it without waiting to be asked when new works or old errors come to my notice by one chance or another. My relations with the parish authorities have been cordial and where co-operation has taken place the result has been satisfactory, I believe, to all concerned.

5. The continued employment by the General Board of Health of six inspectors working over the whole Island under my direct supervision has more than justified the expenditure of £1,000 per annum including costs of travelling. The work of these inspectors keeps me in touch with conditions all over the Colony and to some extent mitigates the deficiency of trained advice and supervision in parochial oragnisations. All reports by these inspectors are forwarded to the parish authorities concerned with any comments which seem to me to be appropriate. These reports are welcomed by most if not all parish sanitary boards.

6. I think it may be claimed that the general sanitation of villages and settlements improves slowly from year to year, but it is very slow. The pace of improvement is slowed by the absence from every parish of trained and authoritative supervision and direction of subordinate staff. Examples are not wanting of the long persistence of nuisances for lack of such supervision and for lack of the strong representations which only an officer possessing both training and definite status can make to lay boards.

7. A feature of the year under review was the holding of a course of instruction for sanitary inspectors with a view to their sitting the examination

for the Certificate of the Royal Sanitary Institute. A fair number of inspectors attended regularly, being granted facilities to do so by the various authorities employing them. Five inspectors travelled to Trinidad for the examination in October 1933 and all gained certificates thus becoming the first Barbadians ever to be fully qualified for the post of sanitary inspector in this Colony. The examination is not easy, the entry fee is twenty dollars and the cost of travelling to Trinidad and back is not a trifle, and I regard it as exceedingly creditable that these five inspectors should have undertaken the study and self-sacrifice involved in obtaining a sound qualification in the work they have undertaken. It will be fitting, I think, if their employers can give some tangible recognition of their efforts and enthusiasm. There is a certainty that there will be forthcoming in 1934 sufficient candidates to justify holding (for the first time) the Royal Sanitary Institute's examinations in Barbados in that year and I have been fortunate to obtain the promise of the assistance of Dr. Stoute in teaching meat inspection. Indeed he already has an informal class of instruction at the abattoir, attended by those who took the Sanitary Inspector's Certificate in 1933 and intend to attempt that for Inpector of Meat and Food in 1934.

(C) SANITARY CONDITIONS AT ELEMENTARY SCHOOLS.

1. In my last report I referred in somewhat strong terms to hygienic deficiencies at public elementary schools. Over-crowding of the class rooms is still very general though some relief by new construction has been effected here and there. Nearly everywhere water-containers with taps have replaced the insanitary practice of dipping mugs into open pails.

2. Very commendable efforts have been made recently in some parishes to improve latrine arrangements at the schools. There are still many schools, however, where the sanitary accommodation is not merely deficient in amount and poor in quality but where conditions are indescribably filthy. I repeat my remark of last year that it is a futile pretence for teachers to give instruction in hygiene in government schools at which there are provided for the children latrines so insanitary that the children's parents might well be prosecuted for like conditions at home. I recognise that it is not possible at one stroke to provide every school with a first class latrine, but I can see no reason why the responsibile authorities should not *at once* put *every* school latrine into a condition at least of decency and so maintain it. Indeed I am at a loss to understand how parochial authorities professing competence to manage their own sanitary affairs can have evaded their responsibilities, permitting the filthy and discreditable arrangements which appear to have persisted for years and years. The schools are government schools and in my opinion the responsibility of providing and maintaining proper sanitary arrangements thereat should be assumed by the central education authority instead of resting, as it now does, upon eleven parochial sanitary boards or, as it did formerly, on even more numerous boards of school managers.

3. There is no systematic inspection of school children and this is not possible with the present staff. This is one of the desirable measures it will be possible to initiate when a Sanitation Officer is appointed.

(D) THE BACTERIOLOGICAL AND PATHOLOGICAL LABORATORY

During the period under review Dr. J. E. Walcott was appointed Bacteriologist and Pathologist and a beginning was made with the re-equipment and improvement of layout of the laboratory which were noted in my last report as having been recommended, approved and provided for. The benefit of these improvements is already being felt.

(E) PORT HEALTH OFFICER'S DEPARTMENT.

1. The staff concerned with this work consists of a whole-time Port Health Officer, (Dr. J. D. Alleyne), a part-time Assistant Port Health Officer, (Dr. Bancroft), a clerk, a messenger and an odd job man, the last being concerned with the fumigation of ships. I am of opinion that elimination of medical visits to ships from clean ports and without sickness on board would permit of economies in the staffing of this department.

2. Trapping and poisoning of rats in the neighbourhood of the wharves and warehouses, though not conducted under the Port Health Officer may con-

veniently be referred to here. The staff concerned consists of 4 boy rat catchers working under an inspector of the General Board of Health, supervised by the chief inspector of that Board and when occasion arises by myself. Arsenic is the poison chiefly employed; it is mixed in baits of corn meal. The results in the period under review were as follows: Trapped, 1,567 rats; poisoned, 781 rats and 643 mice. Probably the number poisoned was really greater for only recovered corpses are reckoned here. 405 rats were examined by the Bacteriologist and none was found to be plague-infected.

3. The provisions of the West Indian Intercolonial Sanitary Convention, to which Barbados, the other British West Indian Islands, (except Jamaica), and British Guiana are parties, were applied throughout the year. This Colony is not yet a party to the International (Paris) Sanitary Convention.

4. No case of quarantinable disease occurred in the Island or among the shipping.

5. The Quarantine Board possesses a rather worn out Clayton apparatus and there is need of a modern disinfector.

6. The Port Health Officer's Report is printed as an Appendix.

PART IV. POOR RELIEF.

(A) POOR RELIEF IN THE ISLAND AS A WHOLE.

1. The Chief Medical Officer still lacks statutory authority to make the extensive investigations which might be necessary conscientiously to satisfy himself, as required by law, "that poor relief in all its departments is efficiently "and properly carried out." Despite this lack I have again experienced no difficulty in pursuing any enquiries I have wished to make.

2. Last year, reporting only three months after taking up my appointment, I commented on the fantastically inaccurate statistics of poor relief which had formerly been published and did not think it worth while to print the only data then available. During the year under review a new system of recording parochial data of poor relief has been organised and gradually introduced. The strictly accurate figures which that system will produce are not available on this occasion (i.e for the year 1933-34), for it was not possible to put the revised method into full swing in every parish until the commencement of the year 1934-35. Nevertheless, the former sources of error having been recognised, every endeavour was made to eliminate these and total figures were obtained for 1933-34 which, while known to be only approximations, are sufficiently near the truth, in my belief, to be worth publishing as an indication of the real position of Barbados in respect of poor relief. I do not yet think it justifiable to publish a detailed analysis of the figures. My next report will contain really accurate data and thereafter it should be possible to follow, year by year, the fluctuations of the extent to which the population of the Island and of each parish is dependent on poor relief in its various forms.

3. The following figures are approximations giving an idea of the numbers of people who received various kinds of relief provided by the Guardians under the Poor Relief Acts.

No. of persons in the Island who received any kind of poor relief ..	24,531
" " " " " " " " medical relief	18,338
" " " " " " " " cash relief	4,930
" " " " " " " " relief in kind	1,009
No. of persons in the Island who were housed in an Almshouse for non-medical reasons	1,100
No. of persons in the Island who were buried at parish expense	584

The first figures given, i.e., total persons who received relief, forms an interesting contrast to that last published in 1931 which was 45,516, while the peak of inaccuracy, not of pauperism, occurred in 1930 for which year the figure published was 105,240.

4. The expenditure incurred by ten of the eleven‡ parishes in conducting the relief referred to above amounted to £39,602 4. 8. The individual parochial expenditures are shown in Appendix II.

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‡ The parish of St. Peter has not furnished the reports required by law.

5. The condition of the parochial almshouses is in general satisfactory and the inmates are well cared for. Most of the buildings are old and not very convenient but the Boards of Guardians continue steadily to effect improvements and have carried out many suggestions which I have made to them.

JOHN F. C. HASLAM, M.D., F.R.C.P.E., D.P.H.,
Chief Medical Officer.

APPENDIX I.

COST OF PAROCHIAL PUBLIC HEALTH ADMINISTRATION.

Compiled from returns published in the Official Gazette in accordance with Section 19 of the Public Health Act.

St. Michael	$ 37,844.16
Christ Church	9,519.88
St. George	3,170.71
St. Philip	2,303.32
St. John	2,808.39
St. James	2,171.75
St. Thomas	1,609.90
St. Peter	No return ‡
St. Lucy	1,972.47
St. Joseph	2,312.38
St. Andrew	2,116.06
	$ 65,829.04

Equivalent to £13,714. 7. 8.

APPENDIX II.

COST OF PAROCHIAL POOR RELIEF.

St. Michael	$ 83,604.30
Christ Church	19,519.31
St. George	11,999.76
St. Philip	16,039.89
St. John	14,108.85
St. James	8,495.94
St. Thomas	8,598.28
St. Peter	No return ‡
St. Lucy	8,368.83
St. Joseph	11,601.02
St. Andrew	7,754.54
	$ 190,090.72

Equivalent to £39,602. 4. 8.

‡ The parish of St. Peter has not published the statement of accounts required by law.

APPENDIX III.

Causes of Deaths Registered during the Year 1933.

Ref. No. (1)	Causes of Death. (2)	Number Registered in St. Michael		Christ Church		St. George		St. Philip		St. John		St. James		St. Thomas		St. Peter		St. Lucy		St. Joseph		St. Andrew		Total		
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Persons.
	I. INFECTIOUS AND PARASITIC DISEASES.																									
1	Typhoid and paratyphoid fevers ... —	5	13	2	2	3	...	1	...	2	..	...	...	1	...	...	2	...	...	...	...	1	2	15	19	34
2	Typhus fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	Small-pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	...	...
4	Measles	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	Scarlet fever	...	...	..	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6	Whooping cough	1	...	..	1	...	...	...	...	...	1	...	3	3	2	1	1	1	...	2	...	...	2	...	10	8	18
7	Diphtheria	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	Influenza	3	3	5	7	1	1	...	3	1	1	...	...	...	...	...	...	...	—	...	—	...	...	10	16	26
9	Dysentery	3	5	...	...	...	2	4	4	...	2	1	1	2	...	4	2	1	2	1	3	...	...	16	21	37
10	Plague	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
11	Tuberculosis of the respiratory system ... —	23	33	4	10	1	3	4	2	...	5	3	1	...	...	...	...	2	2	1	—	—	2	88	58	96
12	All other forms of tuberculosis	...	3	...	1	...	—	...	...	...	...	...	1	...	...	...	...	...	...	—	...	...	...	...	5	5
13 (a)	Syphilis. (under 5 years) — — ...	67	71	10	12	37	29	6	1	20	21	9	8	7	18	10	13	16	18	23	12	2	3	207	206	413
(b)	(5 years and over) ... — — ...	25	23	1	2	4	4	1	...	7	4	2	3	2	4	...	3	3	8	1	2	1	1	47	54	101
14	Purulent infection and septicaemia, non-puerperal ..	4	4	...	1	...	1	...	1	1	1	...	...	...	...	...	1	...	...	...	...	1	...	6	9	15
15	Malaria	...	...	...	...	...	...	...	—	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16 (a)	Diseases caused by protozoa (39)	...	...	..	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(b)	Diseases caused by helminths (40 42)	1	4	...	..	...	...	2	1	...	2	...	1	1	...	1	...	...	...	...	1	...	1	5	10	15
17 (a)	Tetanus (22)	9	5	6	3	3	2	..	1	3	1	4	1	1	2	1	3	1	...	2	2	...	...	30	20	50
(b)	Leprosy (33)	4	4	...	...	..	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	4	4	8
(c)	Febrile Jaundice	9	1	5	...	4	...	5	2	...	...	3	...	4	1	2	1	...	...	...	...	2	1	34	6	40
(d)	Acute Poliomyelitis	2	1	...	...	...	...	...	1	1	...	...	...	1	—	...	...	...	...	...	...	...	...	4	2	6
(e)	Other diseases under this group	1	1	...	1	2	...	...	2	1	1	...	...	...	...	...	1	1	...	...	...	...	...	5	6	11
	Total Group I	157	171	33	40	55	42	23	18	37	38	25	19	21	26	19	27	24	32	28	20	9	11	431	444	875
	II. CANCER AND OTHER TUMOURS																									
18 (a)	Cancer of the buccal cavity and pharynx (45) ...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	3
(b)	Cancer of the digestive organs and peritoneum (46) ...	7	18	1	4	...	2	1	...	4	...	...	1	1	...	...	2	...	1	4	2	2	2	20	32	52
(c)	Cancer of the respiratory organs (47)	...	1	...	...	...	...	...	—	...	—	...	...	...	...	...	...	...	...	...	..	...	...	—	1	1
(d)	Cancer of the uterus (48)	...	10	...	...	...	4	...	3	...	3	...	1	...	2	...	1	...	...	...	2	...	...	...	26	26
(e)	Cancer of other female genital organs (49) ...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(f)	Cancer of the breast (50)	...	4	...	1	—	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
(g)	Cancer of the male genito-urinary organs (51) ...	1	...	...	...	1	...	1	...	1	...	2	...	...	...	...	...	...	...	...	...	...	...	...	6	6
(h)	Cancer of the skin (52)	1	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	1	...	...	...	7	...	7
(i)	Cancer of other or unspecified organs (53) ...	1	1	1	...	...	1	1	...	...	1	...	1	...	...	...	1	...	—	...	1	...	...	2	2	4
19	Tumours, non-malignant or of unspecified nature ...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	5	8
	Total, Group II	11	35	4	5	1	7	3	4	6	5	2	3	1	2	...	5	...	1	5	5	2	2	35	74	109

APPENDIX III—*Continued.*

Causes of Deaths Registered during the Year 1933.

Ref. No. (1)	Causes of Death. (2)	Number Registered in St. Michael		Christ Church		St. George		St. Philip		St. John		St. James		St. Thomas		St. Peter		St. Lucy		St. Joseph		St. Andrew		Total		
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Persons.
	III. RHEUMATIC DISEASES, DISEASES OF NUTRITION AND OF ENDOCRINE GLANDS, AND OTHER GENERAL DISEASES.																									
20	Acute rheumatic fever	...	...	1	1	...	1	2	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	4	2	6
21	Chronic rheumatism and gout	...	1	...	1	...	...	...	...	1	1	...	...	...	...	...	1	...	...	...	...	...	...	1	4	5
22	Diabetes millitus	7	8	...	...	...	...	...	...	2	...	...	...	1	...	...	1	1	...	...	...	...	1	11	10	21
23 (a)	Pellagra	10	40	3	4	...	6	1	5	...	1	...	4	...	3	1	...	1	1	...	2	2	4	18	70	88
(b)	Other vitamine deficiency diseases	3	3	...	...	...	1	...	...	2	5	...	...	...	...	...	...	...	...	...	...	...	1	5	10	15
24	Diseases of the thyroid and parathyroid gland	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
25	Other general diseases	...	1	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	2	3
	Total, Group III.	20	54	5	6	...	8	3	5	5	8	...	4	2	3	1	2	2	1	...	2	2	6	40	99	139
	IV. DISEASES OF THE BLOOD AND HAEMATOPOIETIC ORGANS.																									
26	Pernicious and other anaemias	...	2	1	...	...	...	...	...	1	...	...	...	...	1	...	...	...	1	...	...	...	...	2	4	6
27	Leukæmia, aleukæmic and other diseases of the blood and hæmatopoetic organs	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
	Total, Group IV.	...	2	1	...	...	...	...	1	1	...	...	...	...	1	...	...	...	1	...	...	...	...	2	5	7
	V. CHRONIC POISONINGS AND INTOXICATIONS.																									
28	Alcoholism (chronic or acute)	1	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	2	5
29	Other chronic poisonings	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Total, Group V.	1	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	2	5
	VI. DISEASES OF THE NERVOUS SYSTEM AND ORGANS OF SPECIAL SENSE.																									
30	Simple meningitis	2	...	1	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	4	1	5
31	Progressive locomotor ataxy	2	2	...	...	1	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	7	2	9
32	Cerebral haemorrhage, embolism and thrombosis	22	64	10	16	4	7	8	11	5	8	2	8	1	3	4	2	6	9	2	4	1	3	65	135	200
33	General paralysis of the insane	3	...	...	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3
34	Dementia praecox and other psychoses	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
35	Epilepsy	2	1	2	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	2	7
36 (a)	Infantile convulsions	2	2	...	...	...	...	...	...	1	...	...	...	...	3	...	...	...	...	...	...	...	...	3	5	8
(b)	Other diseases of the nervous system	3	1	1	3	...	...	...	1	...	1	...	...	...	...	...	1	...	1	...	...	...	...	4	8	12
	Diseases of the eye, ear, and annexa	...	...	...	2	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	3	4
	Total, Group VI	37	71	14	21	5	8	12	13	6	9	3	9	1	6	4	3	6	10	2	4	2	3	91	157	249

APPENDIX III—*Continued.* Causes of Deaths Registered during the Year 1933.

Ref. No. (1)	Causes of Death. (2)	St. Michael.		Christ Church.		St. George.		St. Philip.		St. John.		St. James.		St. Thomas.		St. Peter.		St. Lucy.		St. Joseph.		St. Andrew.		Total.		
		Males	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Persons.
	VII. DISEASES OF THE CIRCULATORY SYSTEM.																									
38	Pericarditis	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	1	2
39	Acute endocarditis	2	3	...	2	...	..	...	1	...	1	2	...	1	...	...	4	...	...	...	...	..	2	3	13	18
40	Chronic endocarditis, valvular disease	8	11	3	7	...	1	7	2	3	2	1	...	3	4	2	1	...	...	...	...	3	6	30	34	64
41	Diseases of the myocardium	7	12	...	2	4	8	...	...	1	...	11	15	1	1	1	...	1	...	1	1	...	...	27	39	66
42	Diseases of the coronary arteries, angina pectoris	...	1	1	1	...	...	...	...	1	...	...	...	1	...	2	1	...	...	...	...	...	...	5	3	8
43	Other Diseases of the heart	20	43	1	5	2	2	...	...	3	1	1	...	1	1	2	...	1	1	2	1	...	1	33	55	88
44	Aneurysm, other than of the heart	14	4	1	...	4	1	1	...	1	3	1	1	...	1	1	3	...	6	1	1	...	1	24	21	45
45 (a)	Arterio-sclerosis. (97)	8	12	4	6	5	4	5	10	3	8	...	...	3	1	3	5	1	1	1	...	1	1	34	48	82
(b)	Gangrene. (98)	9	12	4	3	3	2	1	...	1	2	...	...	2	1	...	2	1	2	—	...	...	...	21	24	45
46 (a)	Other diseases of the arteries and veins	...	2	...	1	...	...	—	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	3	3
(b)	Diseases of the lymphatic system	...	...	...	...	...	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(c)	Other diseases of the circulatory system	...	...	...	...	...	..	...	...	...	...	...	1	..	...	...	1	...	...	...	...	..	...	...	2	2
	Total, Group VII.	69	100	14	27	18	18	14	14	13	17	16	17	12	9	11	17	4	10	5	3	4	11	180	243	423
	VIII. DISEASES OF THE RESPIRATORY SYSTEM.																									
47	Bronchitis	21	19	2	1	4	5	2	3	...	3	...	3	3	...	3	3	1	3	4	5	5	6	45	51	96
48	Pneumonia	43	48	4	3	5	2	8	6	3	7	6	10	4	9	8	6	8	7	2	4	11	7	102	109	211
49	Pleurisy	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	3	1	4
50	Other diseases of the respiratory system, (tuberculosis excepted).	5	5	1	1	...	—	1	3	...	...	...	...	...	...	1	...	1	...	...	...	...	...	9	9	18
	Total Group VIII.	70	74	7	5	9	7	11	12	3	10	6	13	7	9	12	9	10	10	6	9	17	13	158	171	329
	IX. DISEASES OF THE DIGESTIVE SYSTEM.																									
51	Ulcer of the stomach or duodenum	3	1	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	5	1	6
52	Diarrhoea and enteritis (under 5 years of age).	49	53	32	28	11	13	20	11	8	4	33	21	12	10	18	17	9	6	4	4	12	14	208	181	389
53	Diarrhoea, enteritis, and ulceration of the intestines, (5 years and over).	11	12	2	8	...	1	4	6	...	...	...	2	1	1	...	...	...	...	...	...	2	4	20	34	54
54	Appendicitis	1	3	...	...	1	...	...	...	...	...	...	...	..	...	...	1	...	...	...	...	...	...	1	5	6
55	Hernia intestinal obstruction	5	1	1	...	...	...	...	...	1	...	1	..	...	1	...	...	...	...	...	...	...	..	8	2	10
56	Cirrhosis of the liver	1	2	...	...	1	...	1	1	...	...	...	..	...	1	...	2	...	...	...	...	...	...	3	6	9
57	Other diseases of the liver and biliary passages, (including biliary calculus)	1	1	...	1	...	1	...	...	...	...	...	...	2	..	...	...	..	1	1	...	...	...	4	4	8
58	Other diseases of the digestive system	10	6	4	3	...	1	2	1	1	1	...	...	2	2	...	...	2	1	...	1	...	...	21	16	37
	Total, Group IX.	81	79	39	40	12	17	29	19	10	5	34	23	17	15	18	22	10	7	6	4	14	18	270	249	519

APPENDIX III---*Continued.* Causes of Deaths Registered during the Year 1933.

Ref. No. (1)	Causes of Death. (2)	Number Registered in: St. Michael		Xt. Church		St. George		St. Philip		St. John		St. James		St. Thomas		St. Peter		St. Lucy		St. Joseph		St. Andrew		Total		
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Persons.
	X. DISEASES OF THE GENITO-URINARY SYSTEM.																									
59	Nephritis	52	49	9	13	14	6	3	8	3	5	8	7	4	5	4	2	2	...	9	6	1	1	109	102	211
60	Other diseases of the kidney, renal pelvis and ureters	1	1	...	...	...	...	—	1	...	...	...	...	...	...	...	—	...	...	...	...	...	...	1	2	3
61	Calculi of urinary passages	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
62	Diseases of the bladder (excluding tumours)	5	—	1	...	—	...	...	2	1	...	1	—	...	...	—	...	...	...	...	—	—	...	8	2	10
63	Diseases of the urætha, urinary abscess, etc.	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	—	2	...	...	...	...	...	4	...	4
64	Diseases of the prostate	4	...	...	...	—	...	...	...	...	...	...	...	...	...	...	...	...	—	1	...	...	...	5	...	5
65	Diseases of the genital organs (non-venereal)	2	4	...	...	...	...	...	1	...	1	...	...	...	1	...	1	...	..	...	...	...	...	2	8	10
	Total, Group X.	65	54	10	13	14	6	3	12	4	6	9	7	4	6	5	3	4	...	10	6	1	1	129	114	243
	XI. PEGNANCY, LABOUR AND PUERPERAL STATE.																									
66	Accidents of pregnancy	...	2	..	1	—	...	...	...	...	...	...	...	...	...	—	...	...	...	...	—	...	...	...	...	3
67	Puerperal hæmorrhage	...	2	...	1	...	...	...	...	...	...	—	...	...	...	...	...	...	...	...	...	...	...	—	...	3
68	Puerperal septicaemia	...	2	...	2	...	...	...	...	...	...	...	...	...	1	...	—	...	...	...	...	...	...	...	...	...	3
69	Toxæmias of pregnancy (albuminuria or eclampsia)	...	6	...	3	...	2	...	1	...	1	—	...	...	2	...	4	...	3	...	2	...	1	...	...	...	5
70	Other puerperal causes	...	2	—	2	...	—	—	...	...	...	...	...	..	—	...	...	...	1	...	1	...	...	...	...	...	25
	Total Group XI.	...	14	...	9	...	2	—	1	...	1	...	...	...	3	...	4	...	4	...	3	...	1	...	...	...	6
	XII. DISEASES OF THE SKIN AND CELLULAR TISSUE.																									42
71	Diseases of the skin and cellular tissue	4	4	...	1	1	1	1	...	...	1	...	...	1	1	—	...	...	...	1	...	...	...	8	8	16
	XIII. DISEASES OF THE BONES AND ORGANS OF LOCOMOTION.																									
72	Diseases of the bones and organs of locomotion, (tuberculosis and rheumatism excepted)	...	...	...	...	...	...	...	—	...	...	...	...	...	1	...	...	...	...	...	...	—	...	...	...	1	1
	XIV. CONGENITAL MALFORMATIONS.																									
73	Congenital malformations (still births excepted)	2	1	2	...	...	...	2	...	...	1	...	...	2	...	2	...	...	...	...	...	...	...	10	2	12

APPENDIX III—*Concluded.*

Causes of Deaths Registered during the Year 1933.

Ref. No. (1)	Causes of Death (2)	Number Registered in St. Michael		St. Church		St. George		St. Philip		St. John		St. James		St. Thomas		St. Peter		St. Lucy		St. Joseph		St. Andrew		Total		
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Persons.
	XV. EARLY INFANCY.																									
74	Congenital debility	28	22	6	4	6	3	12	14	3	5	7	7	4	7	11	6	4	2	5	2	6	1	92	73	165
75	Premature birth	14	15	2	5	6	5	3	3	1	2	3	2	2	1	2	2	2	1	...	...	5	3	40	39	79
76	Injury at birth	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	1	2
77	Other diseases peculiar to early infancy	3	2	2	...	...	...	2	1	1	1	2	1	3	1	1	1	1	2	1	...	...	1	16	10	26
	Total, Group XV	45	39	10	9	13	8	17	18	5	8	12	10	9	9	14	9	7	6	6	2	11	5	149	123	272
	XVI. SENILITY.																									
78	Senility	19	81	3	4	6	8	5	9	1	4	4	4	3	6	2	11	3	11	3	14	5	13	54	165	219
	XVII. VIOLENT OR ACCIDENTAL DEATHS.																									
79	Suicide	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
80	Homicide	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	6	2	6	8
81 (a)	Accidents (returned as occupational)	2	...	...	...	...	...	...	...	...	...	1	...	...	...	2	...	...	...	...	1	...	...	5	1	6
(b)	Accidents (other)	12	6	2	1	...	...	1	2	2	...	4	1	...	...	1	...	1	1	3	...	...	...	26	11	37
82	Other violent deaths the nature of which (suicide, homicide, accident) is unknown ...	...	3	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	3	5
83	War wounds (including execution of civilians by belligerents)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
84	Capital punishment	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	...	5
	Total, Group XVII	19	9	4	1	1	...	1	2	3	...	5	1	...	...	3	...	1	1	3	1	...	6	40	21	61
	XVIII. CAUSES OF DEATH NOT DETERMINED.																									
85	Causes not specified, or ill-defined	7	3	3	3	3	4	9	5	2	...	5	4	2	7	1	3	2	...	3	4	2	—	39	33	72
	Total, All Groups	607	793	151	184	138	136	133	133	96	113	121	114	82	104	92	115	73	94	78	77	69	90	1,640	1,953	3,593

NOTE :—The Intermediate International List of causes of death is used. Letters in column 1 show further sub-division to meet local requirements and figures in (b) in column 2 when used show the corresponding cause in the Detailed International List (fourth revision 1929.)

Appendix IV.

CAUSES OF DEATHS, ARRANGED IN AGE-GROUPS, REGISTERED IN THE ISLAND DURING 1933.

Ref. No. (1).	Causes of Death. (2)	Under 1 year.	1 year and under 3 years.	3 years and under 5 years.	5 to 10.	10 to 20.	20 &c.	30 &c.	40 &c.	50 &c.	60 &c.	70 &c.	80 &c.	90 and over.	Not stated.	Total.
	I. INFECTIOUS AND PARASITIC DISEASES.															
1	Typhoid and paratyphoid fevers	...	...	2	1	7	15	3	4	2	...	...	...	...	...	34
2	Typhus fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	Small-pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	Measles	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	Scarlet fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6	Whooping cough	12	5	...	1	...	...	...	...	...	...	...	...	...	...	18
7	Diphtheria	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	Influenza	2	3	1	1	...	1	2	1	5	3	2	4	1	...	26
9	Dysentery	15	3	...	...	1	3	...	2	4	4	3	1	1	...	37
10	Plague	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11	Tuberculosis of the respiratory system	...	...	...	...	12	35	31	5	7	5	...	1	...	...	96
12	All other forms of tuberculosis	...	...	...	...	...	4	...	1	...	...	...	...	...	...	5
13 (a)	Syphilis (under 5 years)	333	75	5	...	...	...	...	...	...	...	...	...	...	...	413
(b)	(5 years and over)	...	...	...	3	6	12	27	24	13	14	1	1	...	...	101
14	Purulent infection and septicaemia, non-puerperal	3	...	...	...	2	2	1	...	...	2	3	2	...	...	15
15	Malaria	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16 (a)	Diseases caused by protozoa (39)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(b)	Diseases caused by helminths (40-42)	5	4	1	...	2	...	...	...	...	1	2	...	...	...	15
17 (a)	Tetanus (22)	36	2	3	...	2	1	3	1	...	2	...	...	...	...	50
(b)	Leprosy (33)	...	...	...	...	1	1	2	2	...	...	1	1	...	...	8
(c)	Febrile Jaundice	...	...	...	...	3	17	11	5	2	2	...	...	...	...	40
(d)	Acute Poliomyelitis	1	1	1	2	1	...	...	...	...	...	...	...	...	...	6
(e)	Other diseases under this group	8	2	...	...	...	...	...	...	...	...	...	1	...	...	11
	Total Group I.	415	95	13	8	37	91	80	45	33	33	12	11	2	...	875
	II. CANCER AND OTHER TUMOURS.															
18 (a)	Cancer of the buccal cavity and pharynx (45)	...	...	...	...	...	...	1	...	...	1	...	1	...	...	3
(b)	Cancer of the digestive organs and peritoneum (46)	...	...	...	...	...	...	...	4	11	19	16	2	...	...	52
(c)	Cancer of the respiratory organs (47)	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
(d)	Cancer of the uterus (48)	...	...	...	...	...	...	1	8	6	8	3	...	...	...	26
(e)	Cancer of other female genital organs (49)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(f)	Cancer of the breast (50)	...	...	...	...	...	...	...	3	1	2	...	...	...	...	6
(g)	Cancer of the male genito-urinary organs (51)	...	...	...	...	...	...	1	...	...	4	2	...	...	...	7
(h)	Cancer of the skin (52)	...	...	...	...	...	...	...	...	...	2	2	...	...	...	4
(i)	Cancer of other or unspecified organs (53)	...	...	...	...	...	...	...	...	4	2	2	...	...	...	8
19	Tumours, non-malignant or of unspecified nature	...	...	1	...	...	...	...	1	...	...	...	...	...	...	2
	Total Group II.	...	...	1	...	...	...	3	17	22	38	25	3	...	...	109

Appendix IV—*Continued.*

CAUSES OF DEATHS, ARRANGED IN AGE-GROUPS, REGISTERED IN THE ISLAND DURING 1933.

Ref. No. (1)	Causes of Death. (2)	Under one year.	1 year and under 3 years.	3 years and under 5 years.	5 to 10.	10 to 20.	20 &c.	30 &c.	40 &c.	50 &c.	60 &c.	70 &c.	80 &c.	90 and over.	Not stated.	Total.
	III. RHEUMATIC DISEASES, DISEASES OF NUTRITION AND OF ENDOCRINE GLANDS, AND OTHER GENERAL DISEASES.															
20	Acute rheumatic fever	—	...	—	...	3	...	...	1	...	1	1	...	—	—	6
21	Chronic rheumatism and gout	...	...	...	...	...	...	...	1	1	1	1	...	1	...	5
22	Diabetes militus	...	1	...	1	1	...	...	3	5	7	3	...	...	...	21
23 (a)	Pellagra	...	...	...	...	1	12	7	11	14	27	10	5	...	1	88
(b)	Other vitamine deficiency diseases	5	3	...	...	...	—	...	2	2	...	2	1	...	...	15
24	Diseases of the thyroid and parathyroid gland	...	..	...	...	..	...	1	...	...	...	...	...	...	...	1
25	Other general diseases	1	...	...	...	1	...	...	...	1	...	...	...	...	...	3
	Total Group III	6	4	...	1	6	12	8	18	23	36	17	6	1	1	139
	IV. DISEASES OF THE BLOOD AND HAEMATOPOIETIC ORGANS.															
26	Pernicious and other anæmias	...	...	...	...	...	1	1	3	...	...	...	1	...	...	6
27	Leukæmia, aleukæmic and other diseases of the blood and hæmatopœtic organs	...	..	...	—	...	...	—	1	...	...	...	...	...	..	1
	Total Group IV	...	...	...	...	...	1	1	4	...	.	...	1	...	...	7
	V. CHRONIC POISONINGS AND INTOXICATIONS.															
28	Alcoholism (chronic or acute)	...	...	...	...	...	...	1	...	...	2	1	...	1	..	5
29	Other chronic poisonings	...	...	...	...	...	...	...	...	.	...	...	...	...	...	...
	Total Group V	...	...	...	...	...	...	1	...	...	2	1	...	1	...	5
	VI. DISEASES OF THE NERVOUS SYSTEM AND ORGANS OF SPECIAL SENSE.															
30	Simple meningitis	2	—	...	...	...	...	...	1	1	1	...	...	...	...	5
31	Progressive locomotor ataxy	...	...	...	...	1	—	...	2	3	2	1	...	...	...	9
32	Cerebral hæmorrhage, embolism and thrombosis	...	...	...	...	...	1	7	13	32	63	66	16	1	1	200
33	General paralysis of the insane	...	...	...	...	...	...	1	.2	...	...	...	...	—	...	3
34	Dementia præcox and other psychoses	...	...	...	...	...	...	1	...	...	..	...	...	...	...	1
35	Epilepsy	...	...	...	...	2	4	—	...	...	1	...	...	...	...	7
36 (a)	Infantile convulsions	5	2	1	...	...	...	...	...	...	...	..	...	...	...	8
(b)	Other diseases of the nervous system	...	—	...	2	1	2	2	...	3	1	1	...	...	...	12
37	Diseases of the eye, ear, and annexa	...	1	1	...	...	...	...	...	2	...	—	...	...	...	4
	Total Group VI	7	3	2	2	4	7	11	18	41	68	68	16	1	1	249

Appendix IV---*Continued.*

CAUSES OF DEATHS, ARRANGED IN AGE-GROUPS, REGISTERED IN THE ISLAND DURING 1933.

Ref. No. (1)	Causes of Death. (2)	Under 1 year.	1 year and under 3 years.	3 years and under 5 years.	5 to 10.	10 to 20.	20 &c.	30 &c.	40 &c.	50 &c.	60 &c.	70 &c.	80 &c.	90 and over.	Not stated.	Total.
	VII. DISEASES OF THE CIRCULATORY SYSTEM.															
38	Pericarditis	...	...	...	...	1	...	...	1	...	...	...	...	...	...	2
39	Acute endocarditis	...	1	...	3	7	5	2	...	...	...	...	...	...	...	18
40	Chronic endocarditis, valvular disease	...	1	...	...	...	2	7	7	11	19	13	4	...	...	64
41	Diseases of the myocardium	...	...	...	...	...	1	8	7	13	24	11	2	...	...	66
42	Diseases of the coronary arteries, angina pectoris	...	...	...	...	...	...	1	1	3	1	2	...	...	...	8
43	Other diseases of the heart	...	...	...	...	...	...	7	7	18	18	23	15	...	...	88
44	Aneurysm, other than of the heart	...	...	...	...	...	4	4	8	12	11	5	1	...	...	45
45 (a)	Arterio-sclerosis. (97)	...	...	...	...	...	...	1	3	7	18	36	16	1	...	82
(b)	Gangrene. (98)	...	...	...	1	...	...	...	1	4	4	16	16	3	...	45
46 (a)	Other diseases of the arteries and veins	...	...	...	...	...	...	...	...	1	1	1	...	...	...	3
(b)	Diseases of the lymphatic system	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(c)	Other diseases of the circulatory system	...	...	...	...	...	...	1	...	...	...	...	1	...	...	2
	Total Group VII	...	2	...	4	8	12	31	35	69	96	107	55	4	...	423
	VIII. DISEASES OF THE RESPIRATORY SYSTEM.															
47	Bronchitis	50	16	2	2	...	...	2	4	2	2	13	1	2	...	96
48	Pneumonia	97	26	7	4	10	11	18	5	7	10	9	6	1	...	211
49	Pleurisy	...	...	...	...	1	1	...	...	...	...	...	2	...	...	4
50	Other diseases of the respiratory system, (tuberculosis excepted)	4	2	1	...	1	1	1	2	3	1	2	...	...	...	18
	Total Group VIII	151	44	10	6	12	13	21	11	12	13	24	9	3	...	329
	IX. DISEASES OF THE DIGESTIVE SYSTEM.															
51	Ulcer of the stomach or duodenum	...	...	...	...	...	...	1	2	1	2	...	...	...	...	6
52	Diarrhoea and enteritis (under 5 years of age)	340	48	1	...	...	...	...	...	...	...	...	...	...	...	389
53	Diarrhoea, enteritis, and ulceration of the intestines, (5 years and over)	...	...	...	2	1	2	2	5	9	7	16	10	...	...	54
54	Appendicitis	1	...	...	...	3	1	1	...	...	...	...	...	...	...	6
55	Hernia, intestinal obstruction	2	...	...	...	1	1	...	1	1	1	...	3	...	...	10
56	Cirrhosis of the liver	...	...	...	...	...	...	...	1	3	2	3	...	...	...	9
57	Other diseases of the liver and biliary passages, (including biliary calculus)	...	...	...	...	...	1	2	...	1	4	...	...	...	...	8
58	Other diseases of the digestive system	17	3	...	1	1	1	4	2	1	3	3	1	...	...	37
	Total Group IX	360	51	1	3	6	6	10	11	16	19	22	14	...	...	519

Appendix IV---*Continued.*

CAUSES OF DEATHS, ARRANGED IN AGE-GROUPS, REGISTERED IN THE ISLAND DURING 1933.

Ref. No. (1)	Causes of Death. (2)	Under 1 year.	1 year and under 3 years.	3 years and under 5 years.	5 to 10.	10 to 20.	20 &c.	30 &c.	40 &c.	50 &c.	60 &c.	70 &c.	80 &c.	90 and over.	Not stated.	Total
	X. DISEASES OF THE GENITO-URINARY SYSTEM.															
59	Nephritis	10	6	1	2	3	7	19	28	44	43	38	10	...	...	211
60	Other diseases of the kidney, renal pelvis and ureters	1	...	...	...	...	...	1	...	1	...	...	...	...	...	3
61	Calculi of urinary passages	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
62	Diseases of the bladder (excluding tumours)	...	...	...	1	...	...	1	...	1	3	4	...	...	...	10
63	Diseases of the uretha, urinary abscess, etc.	...	...	...	...	...	...	1	1	1	...	1	...	...	...	4
64	Diseases of the prostate	...	...	...	...	...	...	...	...	1	2	2	...	...	...	5
65	Diseases of the genital organs (non-venereal)	1	...	...	...	1	3	2	1	1	...	1	...	...	...	10
	Total, Group X	12	6	1	3	4	10	24	30	49	48	46	10	...	...	243
	XI. PREGNANCY LABOUR AND PUERPERAL STATE.															
66	Accidents of pregnancy	...	...	...	...	...	3	...	...	...	...	...	...	...	...	3
67	Puerperal hæomorrhage	...	...	...	...	...	1	1	1	...	...	...	...	...	...	3
68	Puerperal septicaemia	...	...	...	...	1	3	1	...	...	...	...	...	...	...	5
69	Toxaemias of pregnancy (albuminuria or eclampsia)	...	...	...	...	5	9	10	1	...	...	...	...	...	...	25
70	Other puerperal causes	...	...	...	...	1	3	1	1	...	...	...	...	...	...	6
	Total, Group XI	...	...	...	...	7	19	13	3	...	...	...	...	...	...	42
	XII. DISEASES OF THE SKIN AND CELLULAR TISSUE															
71	Diseases of the skin and cellular tissue	1	1	1	...	...	2	...	2	1	1	5	1	1	...	16
	XIII. DISEASES OF THE BONES AND ORGANS OF LOCOMOTION															
72	Diseases of the bones and organs of locomotion, (tuberculosis and rheumatism excepted)	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
	XIV. CONGENITAL MALFORMATIONS.															
73	Congenital malformations (still births excepted)	12	...	...	...	...	...	...	...	...	...	...	...	...	...	12

Appendix IV—*Concluded.*

CAUSES OF DEATHS, ARRANGED IN AGE-GROUPS, REGISTERED IN THE ISLAND DURING 1933.

Ref. No. (1)	Causes of Death (2)	Under one year.	1 year and under 3 years.	3 years and under 5 years.	5 to 10	10 to 20.	20 &c.	30 &c.	40 &c.	50 &c.	60 &c.	70 &c.	80 &c.	90 and over.	Not stated.	Total
	XV. EARLY INFANCY.															
74	Congenital debility	162	...	...	...	...	...	...	...	...	...	...	...	...	...	162
75	Premature birth	78	...	...	...	...	...	...	...	...	...	...	...	...	...	78
76	Injury at birth	6	...	...	...	...	...	...	...	...	...	...	...	...	...	6
77	Other Diseases peculiar to early infancy ...	26	...	...	...	...	...	...	...	...	...	...	...	...	...	26
	Total, Group XV	272	..	...	...	...	...	...	...	...	...	...	...	...	...	272
	XVI. SENILITY.															
78	Senility	...	...	...	...	...	...	...	...	...	9	95	85	30	...	219
	XVII. VIOLENT OR ACCIDENTAL DEATHS.															
79	Suicide	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
80	Homicide	...	...	...	...	...	2	3	2	1	...	...	...	...	...	8
81 (a)	Accidents (returned as occupational)	...	...	...	...	...	4	...	1	1	...	...	...	...	...	6
(b)	Accidents (other)	3	4	2	...	6	3	6	4	2	2	2	3	...	...	37
82	Other violent deaths the nature of which (suicide, homicide, accident) is unknown	...	...	...	...	...	1	2	...	...	...	1	...	1	...	5
83	War wounds (including execution of civilians by belligerents)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
84	Capital punishment	...	...	...	...	1	3	1	..	...	...	...	...	...	...	5
	Total, Group XVII	3	4	2	...	7	13	12	7	4	2	3	3	1	..	61
	XVIII. CAUSES OF DEATH NOT DETERMINED.															
85	Causes not specified, or ill-defined	9	38	7	...	...	1	...	2	4	7	4	...	...	...	72
	Total, All Groups	1,248	248	38	27	91	187	215	203	274	372	430	214	44	2	3,593

NOTE :—The Intermediate International List of causes of death is used. Letters in column 1 show further sub-division to meet local requirements and figures in (b) in column 2 when used show the corresponding cause in the Detailed International List (fourth revision, 1929).

APPENDIX V.

BARBADOS.

ANNUAL REPORT OF THE PORT HEALTH OFFICER FOR THE YEAR 1933.

1. During the year 1,125 vessels arrived at Bridgetown and were boarded by the Port Health Officers. (Please see Table "A" for reference whether steamers or sailing craft, nationality, etc.) The arrivals for the year show an increase of 21 when compared with the arrivals of the previous year.

Number of arrivals. Rig, nationality, etc. Increase in arrivals.

The following statement shows the arrivals for the past five years including the year under review.

Statement of arrivals from 1929–1933.

YEAR.	ARRIVALS.
1929	1,122
1930	1,144
1931	1,113
1932	1,104
1933	1,125

2. There were 201 arrivals from ports infected or suspected of being infected with Quarantine diseases.

Arrivals from infected ports.

3. Medical inspection was carried out on passengers and crews of all ships that arrived from infected ports. There was also a routine inspection of all third class and deck passengers who arrived at this port on steamships, and also of passengers and crews on sailing vessels.

Medical inspection carried out.

4. The total number of crews of vessels that arrived at Bridgetown during the year was 58,690. Of these 36,114 were medically inspected.

Total number of crews for the year.

5. The number of passengers whose destination was Barbados was 9,353 consisting of 3,390 first class, 1,442 second class, and 4,521 third class.

Number of passengers whose destination was Barbados.

6. The intransit passengers numbered 22,552, consisting of 14,452 first class, 2,622 second class, and 4,478 third class.

Number of intransit passengers.

7. The total number of passengers medically inspected was 5,135. There were 22 stowaways, who were also medically inspected.

Passengers and stowaways medically inspected.

8. During the year 98 persons were placed under surveillance. These consisted of 86 passengers and 12 seamen.

Number of persons placed under surveillance.

9. The number of inspections made at the office of the Port Health Officer was 357; there was also 24 inspections by the medical officers of the country parishes.

Number of inspections at Health Office; in country parishes.

10. The total amount of quarantine deposits paid into the Colonial Treasury during the year was £112 0. 0.

Amount of quarantine deposits.

11. During the year 11 telegrams were sent to the Colonies—(members of the West Indian Intercolonial Sanitary Convention), notifying them of passengers leaving this Colony and having to complete their term of inspection in the colony to which they were going. There were 5 such telegrams received.

Telegrams sent and received.

12. The s.s. "Bienvenido" was fumigated by order of the Port Health Officer prior to admission to the Careenage. A fee of £2 0. 0. was charged, and was paid into the Colonial Treasury. During the year 47 vessels were fumigated under the Careenage Regulations free of charge.

Fumigation of ships.

Persons sent to the Quarantine Station under observation.

13. During the year 4 passengers, 3 seamen and 730 labourers were sent to the Quarantine Station under observation.

Natives returned as lunatics.

14. There were 5 native lunatics returned to Barbados from other countries.

Countries against which quarantine measures were enforced.

15. During the year quarantine measures were enforced on all South American Countries with the exception of British Guiana, and on Santo Domingo, Haiti and Cuba.

Tonnage.

16. The total tonnage of vessels that arrived here for the year is 2,187,507 (steamships 2, 156,108 and sailing vessels 31,399.) The tonnage of warships is not included.

Leave.

17. The Clerk, Mr. C. D. Gittens, was on seven days vacation leave from the 17th to the 23rd October. During this period the duties were performed by Mr. N. P. Rudder, of the Chief Medical Officer's Office.

TABLE "C".

Nationality.	Steamships.	4 Mast Schooners.	3 Mast Schooners.	Schooners.	Sloops.	Yawls.	Training Ships.	Warships.	Yachts.	Total.
British	374	...	31	328	24	1	...	5	3	766
Dutch	53	...	7	58	...	...	...	...	...	118
Norwegian ...	95	...	...	...	...	...	...	...	...	95
French	44	...	...	1	...	...	...	...	...	45
German ...	42	...	...	...	...	...	...	...	...	42
American ...	32	...	3	1	...	...	...	...	2	38
Danish ...	10	...	...	...	...	...	...	...	...	10
Swedish ...	7	...	...	...	...	...	...	...	...	7
Italian	1	...	...	...	...	...	...	...	...	1
Spanish ...	...	...	...	...	...	...	1	...	...	1
Brazilian ...	1	...	...	...	...	...	...	...	...	1
Venezuelan ...	...	...	...	1	...	...	...	...	...	1
	659	...	41	389	24	1	1	5	5	1,125

APPENDIX VI.

FINAL REPORT ON THE EPIDEMIC OF POLIOMYELITIS IN BARBADOS IN 1933.

1. The last notification was dated 23rd. September, 1933. Two intimations of suspects were received in June. One of these was later confirmed; the other was not seen again by the doctor concerned and cannot be traced. One notification received was found to be a duplicate, a second doctor having notified the same child under a different Christian name.

2 Notifications.

April	..	..	..	48
May	..	..	..	8
June	..	..	..	3
July	..	..	..	1
September	..	..	..	1
Total	..	..	..	61

3. Geographical Distribution.

St. Michael	..	..	..	27
St. Philip	..	..	..	14
Christ Church	..	..	..	6
St. John	..	..	..	4
St. Thomas	..	..	..	3
St. Peter	..	..	..	2
St. Andrew	..	..	..	2
St. George	..	..	..	1
St. James	..	..	..	1
St. Lucy	..	..	..	1
St. Joseph	..	..	..	0
Total	..	..	..	61

4. Race Incidence.

Black	..	..	..	38
White	..	..	..	7
Mixed	..	..	..	12
Not stated	..	..	..	4
Total	..	..	..	61

5. Age Incidence.

Age	0–5 years	6–10 years	11–15 years	16–20 years	Over 20	Total.
No.	49	6	5	1	0	61

6 Deaths And Disappearances.

One year after the epidemic began, 7 of the persons notified as cases of poliomyelitis were dead. In 6 of these acute anterior poliomyelitis was given as the primary cause of death. One child is known to have left Barbados able to walk but limping, and one child could not be traced.

7. Doubtful Cases.

In the case of 6 notifications both the history of the original sickness and the present condition suggest that these were either abortive cases or erroneously

diagosed. In any event these 6 now show no evidence of past or present illness or disability.

8. Part Affected.

Of the remaining 46, (i.e. 61 notified cases less 6 doubtful, 7 dead, 2 not seen) :—

27 were affected in 1 lower leg,
7 " " " both lower legs
4 " " " 1 lower leg and same thigh,
1 was affected in both lower legs and 1 thigh,
1 " " " both lower legs and both thighs,
5 were " " 1 forearm and 1 lower leg,
1 was " " 1 upper arm and shoulder.

9. Muscular Wasting in the Same Group of 46.

12 show no muscular wasting.
14 „ slight muscular wasting.
12 „ distinct muscular wasting.
8 „ pronounced wasting.

10. Deformity in the Same Group of 46.

8 show "flail" foot or some dragging of toes.
2 „ pointed toe with rigid or nearly rigid ankle joint.
1 „ pronounced limp amounting to deformity.
3 „ marked eversion of foot.
3 „ wasting amounting to deformity.
29 „ no deformity.

11. Functional and Wage-earning Capacity of Same Group of 46.

6 show undiminished functional capacity in the affected part.

13 show functional capacity so little below normal that earning power is unlikely to be diminished.

11 show ability to use the affected part actively and may still improve, but earning capacity is likely to be somewhat reduced.

9 will permanently have wage-earning capacity seriously reduced, though surgical relief of the condition may be possible.

7 are infants now unable to walk, some at least of whom are likely to gain the power to do so actively, but about whom a final verdict cannot be given as yet.

0 are likely permanently to be entirely dependent cripples.

12. Mechanism of Infection.

In only two instances were the circumstances such as to suggest direct infection from a known case, and in both of these infection from a common but unrecognised source was equally possible.

13. Treatment of Cases (General).

The late results obtained emphasise the importance of skilled care if deformity is to be avoided. Unqestionably the worst results of this outbreak are to be seen among the very poor whose children remained at home receiving little or no attention of any kind. In my opinion it is regrettable that the General Hospital excluded these cases on the ground that poliomyelitis is an infectious disease for which no special accommodation had been provided. Several children, however, received after-treatment in the General Hospital's out-door department with obvious benefit, while the good results in many of the country cases are due to the mildness of the disease and the care and attention given, often under difficulties, by the Parochial Medical Officers and the staffs of parochial almshouses.

APPENDIX VII.

A REPORT

ON THE

HOSPITAL SERVICES

OF BARBADOS.

PART I.

General Hospital Services.

GENERAL CONSIDERATIONS.

PART I.

GENERAL HOSPITAL SERVICES.

Introductory.

In nearly every British tropical dependency, general and special hospital service for the poor is an accepted responsibility and function of the central governing authority, the necessary arrangements being administered within the medical department of the public service and so under the control of government.

2. In Barbados the central Government maintains and controls a Mental Hospital, a Leper Hospital and, as required by the West Indian Quarantine Convention, buildings available to be used as a Quarantine Hospital. There being no medical department of the public service in Barbados, the several officers in charge of these institutions are individually responsible directly to the government but, with this exception, these institutions work in much the same way as similar ones elsewhere. They are adequate and efficient and require no further notice in this report.

3. In respect of the services ordinarily rendered by a general hospital, governmental arrangements in Barbados are unusual if not unique while, so far as concerns hospital facilities for midwifery and for infectious disease, governmental provision or arrangements, are for all practical purposes, non-existent. These three matters are more fully considered in what follows. The class of persons able to pay for hospital treatment are probably adequately catered for at present so far as amount and suitability of general accommodation are concerned though they, like the free patients, lack some modern laboratory advantages. (See paragraph 7.) While this report, in proposing some changes in respect of hospital service in general, concerns itself almost exclusively with facilities for the sick poor, it presupposes that facilities for those able to pay will be continued on a scale not less extensive, though perhaps less disproportionate, than exists to-day.

4. History of Development of Barbados General Hospital.

What is now called the Barbados General Hospital had its origin at a public meeting in 1839 when it was resolved "that the altered conditions of society in "this Island render it absolutely necessary, for the interest of humanity, to estab- "lish and maintain a general hospital for the reception and treatment of the sick poor." I imagine that the "altered conditions of society" were those following on emancipation of slaves including the impoverishment of former slave owners, particularly the smaller ones for whose care in sickness there would be no provision. Indeed, care for the impoverished whites rather than for the liberated negroes may well have been the real prompter of the 1839 meeting and in this may lie the explanation of the rather puzzling circumstance that to-day so large a proportion as 10.4 per cent of the hospital's small total of beds are reserved for persons able to pay. A further resolutoin called for public subscriptions for the erection and support of the contemplated institution, and there came into being the *Barbados Hospital Society for the relief of the Indigent Sick,* which purchased and converted Carlisle House and added a new building of six wards and other rooms at a total cost of £5,600 "currency" equal to about £3,700 sterling. This sum seems to have been raised by public subscription, but subsequent history suggests that little further progress was made by that means. Nine months after the original public meeting the Society was incorporated by Act with a Court of Trustees and Directors composed of the Governor, the Lord Bishop, the President of the Council, the Speaker of the Assembly, the Attorney General, the Solicitor General and the subscribers of fixed amounts. In May, 1844 the Legislature gave £2,000 for furniture, bedding, etc:, and in July of 1844, five years after the public meeting, the hospital was completed and opened for 75 patients. A year later the Legislature granted a further $3,000.00 but the House of Assembly at that time definitely refused to make an annual grant. The following years seem to have witnessed perpetual failure of charitable subscriptions to meet the needs of the hospital. Twice in 1847 there was a recourse to the Legislature. In 1848 the hospital borrowed $2,000.00 on the Legislature's guarantee. In 1849 the Legislature paid off the loan. In only two years (1852 and 1856) does it appear to have been possible to avoid resort to the public treasury. In 1857 the first annual grant was made, namely £1,041 13. 4. a year

but it was limited to three years. There is a steady history up to 1890 of increasing dependence on government funds and in 1858 this led to a change in the directorate, three members of the Legislative Council and seven members of the Assembly being added by an Act of that year. In 1890 the name of the corporation was changed to "The Barbados General Hospital" and thereafter subscriptions by individuals of the previously prescribed sums ceased to confer directorship. In 1910 was passed the consolidating Act under which this corporation now operates. This Act fixed the statutory government subvention for general purposes at £6,720 per annum and gave a further £1,130 per annum for payment of staff, while it also presented the hospital with a lump sum of £2,000 to enlarge the accommodation. By 1925 the cost to government of supporting the hospital corporation had reached about £17,000 per annum, and to-day it is over £22,000 per annum. The number of beds available for in-patients to-day is only greater by 10 than it was sixteen years ago. The Court of Trustees and Directors now consists of the Governor, the Lord Bishop, the President of the Legislative Council, the Speaker of the House of Assembly, the Attorney General, the Solicitor General, all *ex officio,* three members of the Legisative Council appointed by the President, and seven members of the Assembly appointed by the Speaker; sixteen members in all.

5. Part played by Central Government and by Parochial Authorities in provision of hospital facilities.

From the eventual concession by the Legislature of the principle of annual subvention which had been refused at first, and from its continued willingness to meet the increased demands for extension and maintenance of the hospital's work over and above the statutory annual grant, one must infer some acceptance by the Legislature of responsibility for provision of general hospital facilities for the poor. Having once passed the money to the hospital corporation, however, government seems to have given little heed to the manner of its expenditure and less to the adequacy or otherwise of the arrangements vis-a-vis public need. The Government was, in fact, graciously supporting the work of a charitable body rather than discharging under its own control and supervision a realised and calculated responsibility for the hospital care of the sick poor.

6. This attitude by the Central Government is in keeping with what seems to be a traditional principle of social organisation in Barbados, namely, that all responsibility for care of the poor whether sick or not shall devolve upon parochial authorities and not upon the central authority. Probably, along with the "altered conditions of Society" in 1839, the rapid advance of medical science and especially of the art of surgery, contributed to impress the need for hospital aid beyond what the parishes could provide and led to the maintenance of the Barbados General Hospital as a sort of extra provision, never part of, but supplementary to, the official arrangements. The continued separation of the Barbados General Hospital from the facilities provided and controlled by public authority is in keeping with a tendency, still apparent, to attempt distinction between those who are paupers within the meaning of the Poor Relief Acts and those who are merely poor, and to determine the admission of a person to the Barbados General Hospital or to an Almshouse by his being a technical pauper or not, nearly as much as by his medical needs. The level of subsistence of the labouring and even of the artisan classes in such, however, that sickness quickly means *de facto* if not *de jure* pauperism, and it is impossible to draw any effective line between the two. To my mind, when one is considering public medical aid for the impecunious of Barbados, one must think of the whole of the labouring and artisan class as one. It is neither useful nor sensible to subdivide this very large group by any other criterion than the nature of the need. It would be practicable and useful to say the Almshouses are to accommodate the aged and cases of chronic infirmity not requiring or not remediable by hospital treatment, and the Barbados General Hospital is for the sick poor whose maladies require or are remediable by such treatment. It is merely blinking facts to proceed on the plan that the Almshouses are for the reception of aged or sick paupers and the Barbados General Hospital for the poor sick who are not paupers.

7. Summary of present position.

The position to-day may be summed up thus. The sole statutory responsibility for the care of the sick poor is that which rests upon the eleven parochial authorities. These are, however, legally bound to refuse aid to any who are not

considered to be real paupers, and this restriction denies the benefits of the poor relief Acts to many who are poor indeed. In discharge of their responsibility the parochial authorities provide efficient "general practitioner" service by means of their parochial medical officers. In respect of "hospital" service they provide, at the Almshouses, in-patient accommodation with nursing and medical care, the last given by the parochial medical officer. The parochial accommodation is generally adequate in amount for the legally limited clientele, is perhaps rather primitive but is clean and well ventilated. The nursing varies much in the eleven institutions; it is quite good in some, definitely poor in others; it is not expert in any Almshouse. The medical care is limited in scope and effect by lack of expert nursing, lack of equipment, and general absence of conveniences for modern handling of all but the simplest medical cases and surgery beyond an abscess or a simple fracture. In other words, in respect of hospital service, a *part* of the sick poor of the Island is *partially* catered for officially. This partial official care is supplemented by certain unofficial out-patient and in-patient service supplied at the Barbados General Hospital by a charitable corporation which has no clearly defined responsibility to central or local government authority, or indeed to anyone for the extent, adequacy or efficiency of its provisions, though it is dependent on government grants for its existence. It can be said beyond dispute that to-day the body incorporated as the Barbados General Hospital does not make modern hospital provision complete either in extent or in nature for those needs of the sick poor which, for both legal and financial reasons, are not and cannot be met by parochial authorities. Only 170 beds are available for general cases among the high proportion of the population (about 180,000) who cannot pay when sickness requires modern institutional treatment, good nursing or operation. There is at present an insufficiency of nurses; the accommodation for existing nurses is unsuitable and there is no accommodation for more. It may be added that for years past the number of nurses and the quality of their accommodation have been maintained at a just workable level at the expense of badly needed accommodation for patients, two new wards, erected by government funds to relieve pressure on the surgical department, having been commandeered by the hospital directorate to house nurses. There can be no doubt of the insufficiency of the accommodation, for it has been found necessary to circularise practitioners in an attempt to limit the cases sent to those of urgency. Provision for modern bio-chemical work, so important a part of up-to-date study of medical cases is conspicuous by its absence. The out-patient service is certainly not satisfactory. The reason for this is, in my view, the unsuitable (not to say chaotic) arrangements and inconvenient rooms rather than lack of care, skill or attention, though there is lack of proper supervision of repeat dressings. There is no real provision at the hospital for indoor or outdoor practice of midwifery, (see page 53). Pregnant women are admitted for confinement only when examination indicates trouble ahead, and they, like difficult cases which have gone wrong outside and are taken to the hospital for operative assistance, are dealt with in the ordinary female wards. There is inadequate accommodation for communicable diseases and even this is not to be relied on. (See page 51.)

8. Propositions Arising From The Foregoing.

The foregoing considerations lead me to submit the following propositions.

I believe there is need to define whether responsibility rests upon the Central Government to meet, so far as financial resources permit and in a reasonably up-to-date manner, such hospital needs of the sick poor of the Colony as are not, cannot and should not be met by the parochial authorities under the provisions of the Poor Relief Acts. Acceptance of this responsibility would of course imply that the Legislature would annually make provision against calculated public need, instead of more or less capriciously giving or curtailing the annual donation requested by a charitable society whose general policy in neither revealed to nor controlled by Government. Repudiation of responsibility would make it even more necessary to consider whether it is desirable for the Central Government to continue to pay very large and increasing annual subventions and frequent capital donations to a body over whose operations Government exercises no effective direction. I suggest therefore that it is a matter for consideration whether, with or without admission of theoretical responsibility it is not desirable for the Central Government henceforth to take under its own direct control all hospital provisions and services, the financial burden of which falls upon the public treasury.

PART II.

GENERAL HOSPITAL SERVICES (CONTINUED).

THE WORKING AND MANAGEMENT OF THE COLONY'S MAIN HOSPITAL.

PART II.

GENERAL HOSPITAL SERVICES (CONTINUED).

The Colony's Main General Hospital.

Introductory.

1. However the propositions with which Part I of this Report ended may be determined, it appears certain that government will go on bearing the expense of the main hospital provision of the colony and that this provision will centre round the present general hospital. It is appropriate therefore to consider in greater detail than has yet been done the working of the hospital.

2. My statutory duties include regular inspection of the hospital but my being Chief Medical Officer gives me no executive authority there, nor does it confer any share in the hospital's management, and routine inspection of an institution does not easily lead to close familarity with its internal workings. Furthermore, the only official means of contact between the Chief Medical Officer and the hospital's board of management is a minute book at the hospital which records the fact of his visits along with "any minute he may think proper to make." This is a useful and successful method of proposing minor improvements but is not suited to criticising or bringing under review the matters referred to in succeeding paragraphs. Unofficially, however, I have been in contact with several successive chairmen of the House Committee (as well as with the Secretary-Steward) regarding shortage of nurses, accommodation for nurses, the out-patient arrangements, shortage of beds and other matters which are now reported to government as required of me by law.

3. The Out-Patient Department of the Barbados General Hospital.

The arrangements for attending to out-patients are so confused as to be inefficient, and in passing it may be said that the accommodation for this work is cramped and unsuitable though great improvement could be effected by instituting and sticking to a sensible time-table. Originally, new out-patients were supposed to be seen only on Mondays when the visiting staff attended at a fixed hour to deal with them, while casualties, in the proper sense of medical and surgical emergencies, were attended to by the resident staff at any hour of the day or night. There was, as might be expected, over-burdening of the Monday out-patient consulting hour. Very naturally those whose sickness could not wait until the following week, though not acutely ill in the sense of being true casualties, took to presenting themselves on other days than Mondays and at all hours, until the situation has now been reached where persons with any complaint, however trivial, are admitted within the hospital gates at practically any hour on every day and wait about to be attended to as "casualties." Indeed there has come to be accepted by the management and staff the daily occurrence of what are called "morning casualty" and "afternoon casualty." These "casualties" are, in fact, consultation clinics conducted by the resident staff, fitted in at irregular hours according as other duties and preoccupations permit and the clientele are not really casualties but casuals. To this day, however, Monday is the only *official* day for new out-patients to be seen; on that day only can senior members of the staff be consulted by out-patients,‡ and on that day only are the new-comers scrutinised by the almoner whose very existence is thus made ridiculous. These arrangements lead to several undesirable things. They abolish order from the conduct of the out-patient department; they defeat the intention that all new out-patients shall be seen by a senior member of the staff; they render unavailing the employment of the almoner, and they lead to out-patients hanging about the waiting rooms and grounds of the hospital at all hours. At a recent inspection I found a mixture of hospital workmen and waiting patients lounging (some sleeping) in an open compound and adjacent parts of the out-patient department; one patient was sleeping in a W.C. and a hospital employee in a store room.

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‡ The visiting staff still attend on Mondays but no attempt is made then to refer to them the more difficult cases, and they merely see the same class of case as is dealt with by the resident staff on all other days.

4. Arrangements for Deferred Admission of Patients.

There is admitted to be no system whatever whereby arrangements are made for subsequent admission of an out-patient requiring indoor treatment but for whom no bed is available at the time of first consultation. The practice is to tell the patient to come back on such and such a day, and this coming back, without success, has not infrequently continued until the patient has been disgusted and returned no more. In this connection it is to be remembered that such patients are drawn not only from Bridgetown but from distant parts of the Island.

5. The Visiting Staff of the Barbados General Hospital.

The visiting staff of the hospital, (i.e. those responsible for its professional work), is composed of three visiting surgeons, and three assistant visiting surgeons. Some old records speak of a visiting physician but there is none now. This is a mistake; indeed it is definitely objectionable. To be a member of the visiting staff confers and should confer definite advantage by way of professional prestige in the community. In Barbados it also carries a retaining fee and the valuable right to have private patients in the paying wards.‡ There being no post of visiting physician the only way to these advantages is to profess to be a surgeon. By one stroke all the hospital's patients are deprived of the services of specialist physicians and these are debarred from privileges enjoyed by their surgical brethren. There is a measure of truth in the gibe that to obtain a visiting post at the Barbados General Hospital it is necessary to pretend to be a surgeon, while there is no assurance in the composition of the board which makes appointments that pretence could be distinguished from real competence.

6. The Resident Medical Staff of the Barbados General Hospital.

I have formed the opinion that the present staff of three resident surgeons is insufficient properly to deal with the present work of the hospital. This situation would not be fully relieved even if the Senior Resident Surgeon were freed of his present ill-defined administrative duties, while the imminent opening of the new V.D. Clinic, the impossibility of the Government Bacteriologist's continuing the routine simple laboratory work of the hospital and the extension of the hospital's work which is urgently necessary will make four the minimum number of resident medical staff which can properly carry out the manifold solely professional duties involved.

7. Internal Discipline and Administration at the Barbados General Hospital..

It is with regret that I refer to unsatisfactory internal discipline in the hospital. A comparaticely short acquaintance with the hospital's working and with visiting and resident staff suggested the existence of trouble detrimental to the hospital's welfare. There is only too strong and too plentiful documentary evidence of this, and recent events have made it clear, even to the public, that all has not been well. Difficulties of this sort are probably encouraged, (they are certainly not mitigated), by lack of clear-cut practical rules. The existing rules are chaotic by frequent amendments extending over years and recently the business of the House Committee was impeded by the fact that no two copies of the rules in the hands of members agreed on every point.‡

8. I have formed the opinion that the matters referred to in the immediately proceeding paragraphs are in great measure attributable to the mode of administration in use at the hospital and that this mode of administration, even when not the primary cause, is responsible for the non-remedy of evils arising from other causes.

9. The present composition of the governing body of the hospital is given in detail in paragraph 4 of Part I, and is seen to include the Governor, the Bishop, the two law officers, four persons from the Legislative Council and eight from the Assembly, a very influential directorate but not one necessarily interested in, nor at all likely to be intimate with hospital management. Moreover, such a board is composed entirely of men whose time and energies are already heav-

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‡ The principle of opening pay wards to the patients of selected practitioners only is open to serious objections in a hospital entirely supported by the taxpayers.

‡ Since this was written a new set of rules governing the resident surgeons has been issued.

ily taxed by other branches of public affairs. It is notable that there is no provision for even one medical man to be a director, though it is true that from time to time gentlemen with medical degrees who have happened to be members of the Legislature have served on the Board.

10. In general, the affairs of the hospital as at present constituted are supposed to be conducted by the House Committee (twelve members of the above directorate, three forming a quorum) who by the rules are "charged with the general management and discipline of the hospital in all matters relating thereto."

In effect, however, the enthusiasm and energy of a recent Chairman of the House Committee were such that he acquired and wielded for many years a practical monopoly of influence and control in hospital affairs to an extent which negatived the amendment of the rules which delegated control of discipline to the Senior Resident Surgeon. This regime continued so long that it became accepted as the normal manner of conducting the hospital. There was, indeed, something approaching a lay dictatorship, little relieved by the weekly meeting of Chairman, Matron, Secretary and Senior Resident Surgeon for this conference, under its forceful Chairman, was less a quartette than a solo with chorus of three. There was, for all practical purposes, exclusion of experienced professional guidance from the hospital's routine administration.

I do not wish it to be thought that I decry or disparage the work of the late Mr. Yearwood for the hospital. It may be long before the hospital has another protagonist so willing to spend his time and energies in its interests. In my view, however, neither a layman, albeit forceful and enthusiastic, nor a committee of twelve mainly political personages, is the proper instrument to conduct the "general management and discipline" of a large hospital. The opinion that the administration of past years was not of the right kind is put beyond doubt by a study of the difficulties which arose and their unsuitable and unsuccessful handling immediately death removed the dictatorial control of one man, and it is clear that many members of the hospital's directorate now realise the difficulties of the present position.

11. As has been said, an amendment of the rules made the Senior Resident Surgeon responsible for the discipline and working of the medical side of the institution, but the practice of the late Chairman never allowed this responsibility to be a reality and the Senior Resident Surgeon for long past has been little, if anything, more than the professional senior of the three residents. Indeed his professional duties, as the staff is constituted at present, occupy so much of his time and energies and his relations to other members of the staff (managerial and professional) are so ill-defined that effective discharge of administrative functions is not possible.

12. The 1925 sub-committee of the Public Health Commission which reported on the hospital's administration said much which is equally applicable to-day, particularly concerning internal discipline and the day-to-day handling of the many problems which arise, all of which have a medical aspect. They spoke of the present method of administration as being "devoid of an essential factor, someone with the technical knowledge and experience to supervise the medical arrangements and discipline of the hospital and responsible to the directors," adding: "if stress is laid on this point it is because it is felt that it is the root of the whole matter." The documentary evidence referred to in paragraph 7 includes striking testimony to the unsuitability of attempting to settle questions of professional conduct and hospital routine by the cumbrous machinery of committees, sub-committees and pages of written evidence, and to the difficulties which attend quasi-judicial enquiry by lawyers and politicians into domestic troubles arising from personal and professional friction.

13. That sub-committee considered the need would be met by making the Chief Medical Officer, whose appointment was then foreshadowed, an *ex officio* member of a diminished board of directors. It would certainly strengthen the hospital directorate to diminish its numbers and to make sure of the presence thereon of at least one well qualified medical man, but even if both these recommendations were carried out they could never meet the need stressed by that sub-committee for "someone with the technical knowledge and experience to supervise the medical arrangements and discipline of the hospital." The inspecting duties of the Chief Medical Officer all over the Island, allocated to him after the sub-committee reported, make it impossible for him to fulfill these functions, but even if the Chief Medical Officer had the necessary time and

every possible qualification for hospital management, his membership of a committee jointly charged with responsibility for management and discipline would never put him in a position to exercise the day-to-day, authoritative supervision which the sub-committee thought to be "the root of the whole matter." Sober consideration makes it plain that responsibility for day-to-day management and discipline of a large public hospital must rest upon one person, that person being always on the spot, while the board of management, retaining of course its final jurisdiction in all matters, should find its true function in dealing with appointments and in control of major policy and finance. While it is proper for the Board to make appointments, the filling of vacant medical posts should obviously be done in consultation with the senior medical staff. Quite recently the Board appointed a Senior Resident Surgeon without any reference to the six members of the visiting staff with whom and under whom the new officer must work. Consideration makes it equally plain, and it is a matter of experience in British hospitals financed by government or municipalities and most large voluntary hospitals also, that the responsible head of a medical institution should be a medical man. Neither armies, navies, regiments nor ships perform their daily functions under direction of committees but under specially trained individuals, though in final control (in the background) are army councils and boards of admiralty.

14. The form of everyday control of hospital management and discipline which has established itself in the vast majority of British and American hospitals is the employment of a medical superintendent. In very large institutions this officer's time is entirely taken up by administrative duties and he takes no share in the professional work, and this is especially the case where responsible professional officers are visiting physicians and surgeons. Where the profesional staff are entirely resident then the chief professional as well as administrative responsibilities are borne by the one person. Where the senior medical and surgical staff are visiting officers and the administrative duties do not amount to a whole-time job it is economical and need cause no difficulty or disharmony if it is arranged that the medical superintendent shall have professional responsibility for some special department of work, e.g., the venereal diseases clinic. Working with, but under a medical superintendent a hospital of course requires a steward. It is generally conceded that the administration of the Mental Hospital here is very successfully, smoothly and economically conducted by a Medical Superintendent responsible to the Governor-in-Executive Committee and I see no reason why similar success should not be obtained at the General Hospital (a smaller institution) by a similar administrator responsible to the directors (or preferably, in my view, to the Govenor-in-Executive Committee) but taking no share in the professional work unless it be of some separate department.

PART III.

HOSPITAL ACCOMMODATION FOR INFECTIOUS DISEASES.

1. The need for hospital accommodation for cases of communicable diseases has two aspects. One object is to remove the patient from his ordinary surroundings with their likelihood of contact with and infection of other persons. Another is to provide for the patient, treatment and nursing of a high order, nursing playing a particularly important part in determining the final outcome in certain infective diseases, notably enteric fever, poliomyelitis and diptheria. The late Claude Ker of European fame as a physician of fevers, used to tell his class : "Gentlemen, the treatment of typhoid is a good nurse and if possible two."

2. The Central Government of Barbados makes, directly, no provision for cases of communicable diseases occurring in the ordinary course of events. In the past it has used its quarantine buildings during as extensive epidemic and there is statutory authority to take over schools at such times but for everyday tuberculosis, venereal disease, measles and chickenpox, for occasional diphtheria and poliomyelitis and for the odd case of small-pox which may turn up at any time, there is no provision by Government.

3. As a relic of the old epidemic days of cholera, small-pox and yellow fever and true to the traditional principle of parochial care for the sick poor, the General Board of Health (a central authority) requires each of the eleven

parish authorities to maintain an isolation hospital. The parishes honour the letter of the law and the Island is dotted with empty, unstaffed, poorly equipped and poorly maintained buildings, called isolation hospitals. These vary in quality. There is, for example, the reasonably trim, stone building of Christ Church parish, there are also the wooden shacks of St. George, originally built for Boer prisoners of the South African war, and the ruinous huts of St. John's parish. The majority of these buildings are fairly close to the various almshouses. A few are sufficiently conveniently related to be opened and operated by the almshouse staff when there happens to be an infectious case among almshouse patients. On the whole, this is the exception and the inconvenience and expense which would be entailed by organising kitchens, nursing service, etc : at the isolation hospitals, lead to enteric and other communicable diseases being treated in the almshouses themselves. In the case of some parishes, the parochial isolation hospital is situated in the middle of nowhere and only a major epidemic would justify opening it up. One isolation hospital is let out as a dwelling house.

4. The attitude of the Barbados General Hospital towards communicable diseases is uncertain; its policy I have been unable to fathom. The hospital corporation, by its rules, excludes all cases of communicable disease from its institution although it does, in fact, admit some cases of enteric, diphtheria, tuberculosis and venereal disease. This accommodation cannot, however, be relied on, for at any moment the governing authorities of the Barbados General Hospital may arbitrarily fall back on their rules and refuse such cases. Nor is this a fanciful possibility but an impasse actually encountered in 1933. I realise that under its present constitution the hospital directorate is at perfect liberty to admit or exclude at its own sweet will, but it is difficult to regard an institution exercising such powers as a dependable unit of the machinery for public medical aid or for the protection of the public health.

5. The difficulties of the present situation have confronted me from both the aspects referred to in paragraphs 3 and 4 of this part of this Report. One year after the epidemic of poliomyelitis I surveyed all the surviving patients still in the Island. I am satisfied that certain of the children to-day present a degree of crippling which could have been avoided with certainty by expert nursing and treatment in a well-found hospital. It was entirely fortuitous that examples of gross deformity were not more numerous than they were, since the vast majority of the children had to make the best recovery they could in very poor homes with one or two visits to the doctor and no nursing. The shortcomings of present arrangements, from the angle of isolation with a view to prevention of spread, presented themselves as follows. I was called to a house twenty miles from Bridgetown to consult concerning the diagnosis and procedure in a case looking very like small-pox, in a person newly arrived from outside this colony. It was an exceedingly difficult case in which to make a definite diagnosis, and one was compelled, in Barbados, to keep in mind the consequences of affixing the label small-pox—cables to all the other islands, public alarm, possible interference with shipping and the immediate necessity of a wide-spread and expensive campaign of vaccination, for the community is mainly unvaccinated. The proper course, had facilities been available, was to admit the patient for observation to a functioning isolation hospital or ward with the minimum of publicity and fuss. This was impossible for there is no such place. The Barbados General Hospital was out of the question; the parochial isolation hospital was miles away and miles from anywhere, unequipped, unstaffed and occupied by a private person as a dwelling. Imagine the reverberations of alarm all through the Island with repercussions throughout the West Indies which would have followed the ejection of the tenant of the isolation hospital, its hurried staffing and equipping for reception of a case which rumour would quickly have labelled virulent small-pox although in fact only under observation and turning out eventually to be complicated chickenpox. Anyone who recalls the near approach to public panic locally, the alarmist cables from neighbouring colonies and the damaging gossip in the same, which accompanied the poliomyelitis of 1933 will realise that I have not over coloured the picture. And when the alarm had subsided the parish concerned would have had a bill to foot quite out of proportion to the necessities of the case. In all the circumstances and with the help of colleagues concerning the diagnosis I felt justified in advising that the patient be kept where he was, but there was

revealed a position in which neither the public nor a public medical officer should be placed.

6. I think it no longer necessary or sensible to continue attempting to make extensive provision in advance against the occurrence of widespread epidemic disease. There is good reason to hope and believe that the days of extensive outbreaks are past. If they do come, make-shift arrangements will be necessary in any case. At present needless expense is being imposed year after year upon parish authorities by their being required to maintain in some sort of readiness their present isolation hospitals. For early tuberculosis, for occasional cases of a few communicable diseases and for the ordinary incidence of typhoid, I feel certain that central provision is the proper thing. It would be more efficacious from the point of view of treatment and much more convenient; it need be much less extensive than the present parochial arrangements and, if compared on a basis of proper equipment and maintenance, much less expensive.

7. My proposals would be a male ward and a female ward, of about 6—10 beds each, for early, curable cases of tuberculosis, a male ward and a female ward, of about 6—10 beds each, for observation cases and for communicable disease other than tuberculosis, typhoid and venereal diseases, these wards being partly on the "cubicle" plan. Each of these buildings should form a "block" within the precincts of the general hospital. The present "block" for "fever cases" could then be reserved for and would suffice for enteric cases. Venereal diseases will be catered for in the new clinic now nearly ready, and elsewhere I have made recommendations for the accommodation of advanced tuberculosis cases near their homes and their friends.

8. These proposals are not luxuries of medical aid but ordinary necessities for protection of the public health; such extension of public provision and the additional expenditure involved are, however, added reasons for the consideration of the changes of control and administration referred to in Parts I and II of this Report.

PART IV.

HOSPITAL ACCOMMODATION FOR MIDWIFERY CASES.

1. The eleven parochial boards of guardians admit to their eleven almshouses midwifery cases who are likely to need institutional treatment at the time of delivery and also cases in which difficulties are encountered after labour has commenced. This necessary public assistance is limited on the one hand by the exclusion therefrom of persons not technically paupers, though in these cases the limitation is less rigorously applied than in ordinary sickness. On the other side, the handling of the complications of childbirth at the almshouses is limited by deficiencies of accommodation and equipment. It is right, however, to say that at St. Michael's Almshouse there is now a very satisfactory midwifery department with separate wards for expectant and delivered mothers and a well planned and equipped labour room, while one or two other parishes have provided some accommodation for normal maternity work distinct from the general pauper wards.

2. Notwithstanding the improvements made and still being made, I am satisfied that there is not at the almshouses of the Island, sufficient or sufficiently good provision for difficult and complicated maternity cases among the class of persons admissible to these institutions, while the St. Michael's Almshouse alone of the eleven provides for anything that could be called operative midwifery.

3. Earlier in this report it has been seen that a medical or surgical case beyond the scope of almshouse treatment or not eligible for such *may* get the necessary assistance at the Barbados General Hospital. The difficult or likely-to-be-difficult midwifery case is less fortunate. The Barbados General Hospital does not profess to take in maternity cases at all and makes no arrangement or provision for them. A person diagnosed in advance to have albuminuria or a narrow pelvis, especially if able to pay the charges of the Tercentenary Ward, may obtain admission in order to have appropriate treatment and supervision well before the commencement of labour, but there is space for only a few of such. Poor persons from private practice and from almshouses, who have already developed obstetric complications and who need immediate operative assistance are from time to time admitted to the Barbados General Hospital and dealt with in the ordinary female wards but neither this last-minute admission

nor the accommodation provided is in conformity with modern standards of obstetric practice or of public provision for such.

4. The addition to the Barbados General Hospital of paying and free accommodation for midwifery cases is in my view a necessity of public medical aid and results both important and valuable might be expected from the institution in connection therewith of an out-patient clinic for expectant mothers.

SUMMARY.

The main "general" hospital provision for the sick poor in the Colony consists of the eleven Almshouses and the Barbados General Hospital.

2. The Almshouses cater for only a portion of the sick poor (i.e. the technical paupers), and only partially for the needs of those.

3. The supplementary provision available at the Barbados General Hospital does not cover the needs unprovided for at the Almshouses either in nature or extent.

4. The Barbados General Hospital is incorporated by Act as a charitable society and is operated as such. It is not under the control of direction of the Central Government itself, or of any government department, and the society carries no responsibility for the completeness or deficiency in quantity or quality of its provisions vis-a-vis public need.

5. The Barbados General Hospital was initiated by public subscriptions but it was not able to open originally nor has it since operated without large and increasing subventions from Government. The annual support now exceeds £22,000 and considerable capital expenditure is urgently needed.

6. It is proposed for consideration whether responsibility for reasonably adequate provision for the sick poor does not rest upon Government and whether Government should not in any case directly control an organisation of which it bears the whole financial burden and that a heavy and increasing one.

7. However these two propositions may be decided, hospital needs will continue to be catered for at the present hospital and to be paid for by Government. The present method of administration and daily management of that hospital are reviewed and proposals made for reduction of the size of the board of management and the appointment of a medical superintendent, these changes being desirable whether or no Government assumes direct control of that for which it pays.

8. The present provision of accommodation for cases of communicable disease is considered and found unsuitable and proposals are made for remedy of the position.

9. The present provision of accommodation for midwifery cases is considered and found deficient and proposals are made for maternity wards and an ante-natal clinic. An outline of the requirements, in the form of sketch plans has been submitted to Government.